

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network					
Name	Location	Upstream Node	Downstream Node	Ignored	Tailpipe
Pipe5	FL-112-0029-AN07-6"-PT	PV-2152	Tee73	No	Yes
Pipe2	FL-112-0005-AN07-6"-PT	PSV-2111/2112	Tee74	No	Yes
Pipe7		Tee74	Connector3	No	No
Pipe9	FL-112-0011-AN07-3"-PT	PSV-2113/2114	Tee3	No	Yes
Pipe10	FL-112-0013A-AN07-2"-...	PSV-2121A	Tee4	No	Yes
Pipe11	FL-112-0019A-AN07-2"-...	PSV-2131A	Tee5	No	Yes
Pipe12		Tee21	Tee4	No	No
Pipe13		Tee4	Tee7	No	No
Pipe14		Tee36	Tee24	No	No
Pipe15	FL-112-0119A-AN07-2"-...	BDV-2134A	Tee6	No	Yes
Pipe16	FL-112-0016A-AN07-6"-...	PSV-2122A/2123A	Tee7	No	Yes
Pipe19		Tee5	Tee6	No	No
Pipe20		Tee24	Tee55	No	No
Pipe34		Tee71	Tee16	No	No
Pipe35	V-2103	BDV-2141	Tee16	No	Yes
Pipe40		Tee16	Tee53	No	No
Pipe41	FL-112-0027-AN07-8"-PT	PSV-2141/2142	Tee19	No	Yes
Pipe43		Tee19	Tee73	No	No
Pipe44		Tee78	HorizontalSeparator1	No	No
Pipe45		HorizontalSeparator1	Connector2	No	No
Pipe46	LP FLARE STACK	Connector2	FlareTip1	No	No
Pipe47		Tee7	Tee75	No	No
Pipe48		Tee37	Tee21	No	No
Pipe49	FL-112-0034-AN07-2"-PT	PSV-2271	Tee21	No	Yes
Pipe53	FL-112-0023A-AN07-2"-...	BDV-2132 A	Tee24	No	Yes
Pipe76	FL-112-0022A-AN07-6"-...	PSV-2132A/2133A	Tee36	No	Yes
Pipe77		Tee6	Tee36	No	No
Pipe78	FL-112-0119A-AN07-2"-...	XV-2110	Tee37	No	Yes
Pipe79		Tee3	Tee37	No	No
Pipe113	FL-112-0002-AN07-4"-PT	BDV-2151	Tee53	No	Yes
Pipe114		Connector3	Tee3	No	No
Pipe115	FL-112-0013A-AN07-2"-...	PSV-2121B	Tee55	No	Yes
Pipe116	FL-112-0019A-AN07-2"-...	PSV-2131B	Tee56	No	Yes
Pipe117		Tee55	Tee58	No	No
Pipe118		Tee60	Tee59	No	No
Pipe119	FL-112-0119A-AN07-2"-...	BDV-2134 B	Tee57	No	Yes
Pipe120	FL-112-0016A-AN07-6"-...	PSV-2122B/2123B	Tee58	No	Yes
Pipe121		Tee56	Tee57	No	No
Pipe122		Tee59	Tee67	No	No
Pipe123		Tee76	Tee56	No	No
Pipe124	FL-112-0023A-AN07-2"-...	BDV-2132 B	Tee59	No	Yes
Pipe125	FL-112-0022A-AN07-6"-...	PSV-2132B/2133B	Tee60	No	Yes
Pipe126		Tee57	Tee60	No	No
Pipe139	FL-112-0013A-AN07-2"-...	PSV-2121C	Tee67	No	Yes
Pipe140	FL-112-0019A-AN07-2"-...	PSV-2131C	Tee68	No	Yes
Pipe141		Tee67	Tee70	No	No
Pipe142		Tee72	Tee71	No	No
Pipe143	FL-112-0119A-AN07-2"-...	BDV-2134 C	Tee69	No	Yes
Pipe144	FL-112-0016A-AN07-6"-...	PSV-2122C/2123C	Tee70	No	Yes

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network

Name	Length (m)	Elevation Change (m)	Material	Roughness (mm)	Thermal Conductivity (W/m-K)	Nominal Diameter	Schedule
Pipe5	30.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe2	5.420	0.000	Carbon Steel	0.04572	51.91	8 inch	40
Pipe7	24.480	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe9	15.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe10	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe11	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe12	27.600	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe13	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe14	3.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe15	20.000	0.000	Carbon Steel	0.04572	51.91	3 inch	STD
Pipe16	20.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe19	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe20	19.920	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe34	14.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe35	3.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe40	6.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe41	25.000	0.000	Carbon Steel	0.04572	51.91	8 inch	40
Pipe43	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe44	54.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe45	550.000	0.000	Carbon Steel	0.04572	51.91	12 inch	40
Pipe46	19.000	19.000	Carbon Steel	0.04572	51.91	12 inch	40
Pipe47	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe48	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe49	23.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe53	3.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe76	25.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe77	7.800	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe78	15.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe79	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe113	4.000	0.000	Carbon Steel	0.04572	51.91	3 inch	40
Pipe114	7.560	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe115	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe116	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe117	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe118	3.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe119	20.000	0.000	Carbon Steel	0.04572	51.91	3 inch	40
Pipe120	20.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe121	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe122	19.920	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe123	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe124	3.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe125	25.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe126	7.800	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe139	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe140	20.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe141	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe142	3.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe143	20.000	0.000	Carbon Steel	0.04572	51.91	3 inch	40
Pipe144	20.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network								
Name	Internal Diameter (mm)	Wall Thickness (mm)	Pipe Class	Sizeable	Length Multiplier	Fittings Loss A	Fittings Loss B	Ambient Temperature (C)
Pipe5	154.051	7.112	No	Yes		0.000	0.000	
Pipe2	202.717	8.179	No	Yes		0.000	0.000	
Pipe7	254.508	9.271	No	Yes		0.000	0.000	
Pipe9	254.508	9.271	No	Yes		0.000	0.000	
Pipe10	52.502	3.912	No	Yes		0.000	0.000	
Pipe11	52.502	3.912	No	Yes		0.000	0.000	
Pipe12	254.508	9.271	No	Yes		0.000	0.000	
Pipe13	254.508	9.271	No	Yes		0.000	0.000	
Pipe14	254.508	9.271	No	Yes		0.000	0.000	
Pipe15	77.927	5.486	No	Yes		0.000	0.000	
Pipe16	154.051	7.112	No	Yes		0.000	0.000	
Pipe19	254.508	9.271	No	Yes		0.000	0.000	
Pipe20	254.508	9.271	No	Yes		0.000	0.000	
Pipe34	254.508	9.271	No	Yes		0.000	0.000	
Pipe35	52.502	3.912	No	Yes		0.000	0.000	
Pipe40	254.508	9.271	No	Yes		0.000	0.000	
Pipe41	202.717	8.179	No	Yes		0.000	0.000	
Pipe43	254.508	9.271	No	Yes		0.000	0.000	
Pipe44	254.508	9.271	No	Yes		0.000	0.000	
Pipe45	303.225	10.312	No	Yes		0.000	0.000	
Pipe46	303.225	10.312	No	Yes		0.000	0.000	
Pipe47	254.508	9.271	No	Yes		0.000	0.000	
Pipe48	254.508	9.271	No	Yes		0.000	0.000	
Pipe49	52.502	3.912	No	Yes		0.000	0.000	
Pipe53	52.502	3.912	No	Yes		0.000	0.000	
Pipe76	154.051	7.112	No	Yes		0.000	0.000	
Pipe77	254.508	9.271	No	Yes		0.000	0.000	
Pipe78	52.502	3.912	No	Yes		0.000	0.000	
Pipe79	254.508	9.271	No	Yes		0.000	0.000	
Pipe113	77.927	5.486	No	Yes		0.000	0.000	
Pipe114	254.508	9.271	No	Yes		0.000	0.000	
Pipe115	52.502	3.912	No	Yes		0.000	0.000	
Pipe116	52.502	3.912	No	Yes		0.000	0.000	
Pipe117	254.508	9.271	No	Yes		0.000	0.000	
Pipe118	254.508	9.271	No	Yes		0.000	0.000	
Pipe119	77.927	5.486	No	Yes		0.000	0.000	
Pipe120	154.051	7.112	No	Yes		0.000	0.000	
Pipe121	254.508	9.271	No	Yes		0.000	0.000	
Pipe122	254.508	9.271	No	Yes		0.000	0.000	
Pipe123	254.508	9.271	No	Yes		0.000	0.000	
Pipe124	52.502	3.912	No	Yes		0.000	0.000	
Pipe125	154.051	7.112	No	Yes		0.000	0.000	
Pipe126	254.508	9.271	No	Yes		0.000	0.000	
Pipe139	52.502	3.912	No	Yes		0.000	0.000	
Pipe140	52.502	3.912	No	Yes		0.000	0.000	
Pipe141	254.508	9.271	No	Yes		0.000	0.000	
Pipe142	254.508	9.271	No	Yes		0.000	0.000	
Pipe143	77.927	5.486	No	Yes		0.000	0.000	
Pipe144	154.051	7.112	No	Yes		0.000	0.000	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Name	External Medium Velocity (m/s)	Insulation Description	Insulation Thickness (mm)	Network		Duty (kJ/hr)	VLE Method
				Insulation Conductivity (W/m-K)	Outlet Temperature (C)		
Pipe5		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe2		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe7		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe9		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe10		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe11		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe12		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe13		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe14		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe15		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe16		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe19		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe20		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe34		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe35		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe40		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe41		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe43		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe44		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe45		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe46		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe47		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe48		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe49		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe53		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe76		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe77		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe78		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe79		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe113		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe114		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe115		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe116		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe117		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe118		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe119		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe120		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe121		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe122		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe123		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe124		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe125		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe126		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe139		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe140		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe141		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe142		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe143		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe144		Glass Fibre	0.00	0.040		0.000e+000	Model Default

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Network

Name	Horizontal Pres. Drop	Inclined Pres. Drop	Vertical Pres. Drop	Two Phase Elements	Friction Factor
Pipe5	Model Default	Model Default	Model Default		Model Default
Pipe2	Model Default	Model Default	Model Default		Model Default
Pipe7	Model Default	Model Default	Model Default		Model Default
Pipe9	Model Default	Model Default	Model Default		Model Default
Pipe10	Model Default	Model Default	Model Default		Model Default
Pipe11	Model Default	Model Default	Model Default		Model Default
Pipe12	Model Default	Model Default	Model Default		Model Default
Pipe13	Model Default	Model Default	Model Default		Model Default
Pipe14	Model Default	Model Default	Model Default		Model Default
Pipe15	Model Default	Model Default	Model Default		Model Default
Pipe16	Model Default	Model Default	Model Default		Model Default
Pipe19	Model Default	Model Default	Model Default		Model Default
Pipe20	Model Default	Model Default	Model Default		Model Default
Pipe34	Model Default	Model Default	Model Default		Model Default
Pipe35	Model Default	Model Default	Model Default		Model Default
Pipe40	Model Default	Model Default	Model Default		Model Default
Pipe41	Model Default	Model Default	Model Default		Model Default
Pipe43	Model Default	Model Default	Model Default		Model Default
Pipe44	Model Default	Model Default	Model Default		Model Default
Pipe45	Model Default	Model Default	Model Default		Model Default
Pipe46	Model Default	Model Default	Model Default		Model Default
Pipe47	Model Default	Model Default	Model Default		Model Default
Pipe48	Model Default	Model Default	Model Default		Model Default
Pipe49	Model Default	Model Default	Model Default		Model Default
Pipe53	Model Default	Model Default	Model Default		Model Default
Pipe76	Model Default	Model Default	Model Default		Model Default
Pipe77	Model Default	Model Default	Model Default		Model Default
Pipe78	Model Default	Model Default	Model Default		Model Default
Pipe79	Model Default	Model Default	Model Default		Model Default
Pipe113	Model Default	Model Default	Model Default		Model Default
Pipe114	Model Default	Model Default	Model Default		Model Default
Pipe115	Model Default	Model Default	Model Default		Model Default
Pipe116	Model Default	Model Default	Model Default		Model Default
Pipe117	Model Default	Model Default	Model Default		Model Default
Pipe118	Model Default	Model Default	Model Default		Model Default
Pipe119	Model Default	Model Default	Model Default		Model Default
Pipe120	Model Default	Model Default	Model Default		Model Default
Pipe121	Model Default	Model Default	Model Default		Model Default
Pipe122	Model Default	Model Default	Model Default		Model Default
Pipe123	Model Default	Model Default	Model Default		Model Default
Pipe124	Model Default	Model Default	Model Default		Model Default
Pipe125	Model Default	Model Default	Model Default		Model Default
Pipe126	Model Default	Model Default	Model Default		Model Default
Pipe139	Model Default	Model Default	Model Default		Model Default
Pipe140	Model Default	Model Default	Model Default		Model Default
Pipe141	Model Default	Model Default	Model Default		Model Default
Pipe142	Model Default	Model Default	Model Default		Model Default
Pipe143	Model Default	Model Default	Model Default		Model Default
Pipe144	Model Default	Model Default	Model Default		Model Default

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Network					
Name	Location	Upstream Node	Downstream Node	Ignored	Tailpipe
Pipe145	FL-112-0023A-AN07-2"-... FL-112-0022A-AN07-6"-...	Tee68	Tee69	No	No
Pipe146		Tee70	Tee77	No	No
Pipe147		BDV-2132 C	Tee71	No	Yes
Pipe148		PSV-2132C/2133C	Tee72	No	Yes
Pipe149		Tee69	Tee72	No	No
Pipe150		Tee53	Tee19	No	No
Pipe151		PCV-2135A	Tee75	No	Yes
Pipe152		Tee75	Tee5	No	No
Pipe153		Tee76	Tee58	No	No
Pipe154		PCV-2135B	Tee76	No	Yes
Pipe155		PCV-2135C	Tee77	No	Yes
Pipe156		Tee68	Tee77	No	No
Pipe157		PSV-2293	Tee78	No	Yes
Pipe158		Tee73	Tee78	No	No

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network

Name	Length (m)	Elevation Change (m)	Material	Roughness (mm)	Thermal Conductivity (W/m-K)	Nominal Diameter	Schedule
Pipe145	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe146	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe147	3.000	0.000	Carbon Steel	0.04572	51.91	2 inch	40
Pipe148	25.000	0.000	Carbon Steel	0.04572	51.91	6 inch	40
Pipe149	7.800	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe150	2.400	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe151	4.000	0.000	Carbon Steel	0.04572	51.91	4 inch	40
Pipe152	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe153	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe154	4.000	0.000	Carbon Steel	0.04572	51.91	4 inch	40
Pipe155	4.000	0.000	Carbon Steel	0.04572	51.91	4 inch	40
Pipe156	2.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40
Pipe157	6.000	0.000	Carbon Steel	0.04572	51.91	3 inch	40
Pipe158	10.000	0.000	Carbon Steel	0.04572	51.91	10 inch	40

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network

Name	Internal Diameter (mm)	Wall Thickness (mm)	Pipe Class	Sizeable	Length Multiplier	Fittings Loss A	Fittings Loss B	Ambient Temperature (C)
Pipe145	254.508	9.271	No	Yes		0.000	0.000	
Pipe146	254.508	9.271	No	Yes		0.000	0.000	
Pipe147	52.502	3.912	No	Yes		0.000	0.000	
Pipe148	154.051	7.112	No	Yes		0.000	0.000	
Pipe149	254.508	9.271	No	Yes		0.000	0.000	
Pipe150	254.508	9.271	No	Yes		0.000	0.000	
Pipe151	102.260	6.020	No	Yes		0.000	0.000	
Pipe152	254.508	9.271	No	Yes		0.000	0.000	
Pipe153	254.508	9.271	No	Yes		0.000	0.000	
Pipe154	102.260	6.020	No	Yes		0.000	0.000	
Pipe155	102.260	6.020	No	Yes		0.000	0.000	
Pipe156	254.508	9.271	No	Yes		0.000	0.000	
Pipe157	77.927	5.486	No	Yes		0.000	0.000	
Pipe158	254.508	9.271	No	Yes		0.000	0.000	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network							
Name	External Medium Velocity (m/s)	Insulation Description	Insulation Thickness (mm)	Insulation Conductivity (W/m-K)	Outlet Temperature (C)	Duty (kJ/hr)	VLE Method
Pipe145		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe146		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe147		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe148		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe149		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe150		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe151		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe152		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe153		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe154		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe155		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe156		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe157		Glass Fibre	0.00	0.040		0.000e+000	Model Default
Pipe158		Glass Fibre	0.00	0.040		0.000e+000	Model Default

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Network

Name	Horizontal Pres. Drop	Inclined Pres. Drop	Vertical Pres. Drop	Two Phase Elements	Friction Factor
Pipe145	Model Default	Model Default	Model Default		Model Default
Pipe146	Model Default	Model Default	Model Default		Model Default
Pipe147	Model Default	Model Default	Model Default		Model Default
Pipe148	Model Default	Model Default	Model Default		Model Default
Pipe149	Model Default	Model Default	Model Default		Model Default
Pipe150	Model Default	Model Default	Model Default		Model Default
Pipe151	Model Default	Model Default	Model Default		Model Default
Pipe152	Model Default	Model Default	Model Default		Model Default
Pipe153	Model Default	Model Default	Model Default		Model Default
Pipe154	Model Default	Model Default	Model Default		Model Default
Pipe155	Model Default	Model Default	Model Default		Model Default
Pipe156	Model Default	Model Default	Model Default		Model Default
Pipe157	Model Default	Model Default	Model Default		Model Default
Pipe158	Model Default	Model Default	Model Default		Model Default

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Component Data

Name	ID	Mol. Wt.	Critical Temperature (K)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
H2O	61	18.015	647.30	220.187	0.05710	0.04357	0.34400
CO2	53	44.010	304.10	72.687	0.09390	0.09383	0.23894
H2S	54	34.076	373.60	89.065	0.09800	0.09939	0.08100
Methane	1	16.043	190.70	45.394	0.09900	0.09939	0.01150
Ethane	2	30.070	305.43	47.826	0.14800	0.14575	0.09860
Propane	3	44.097	369.90	41.554	0.20000	0.20008	0.15240
i-Butane	4	58.124	408.10	35.463	0.26300	0.25683	0.18479
n-Butane	5	58.124	425.20	36.953	0.25499	0.25439	0.20100
i-Pentane	6	72.151	460.40	32.323	0.30799	0.30959	0.22224
n-Pentane	7	72.151	469.60	32.738	0.31099	0.31132	0.25389
n-Hexane	9	86.178	507.90	29.303	0.36800	0.36820	0.30070
n-Heptane	14	100.205	540.16	26.355	0.42598	0.43044	0.34979
n-Octane	22	114.232	568.60	23.953	0.48600	0.49042	0.40180
n-Nonane	25	128.259	594.60	21.988	0.54299	0.55290	0.44549
n-Decane	26	142.285	617.60	20.063	0.60197	0.61922	0.48848
Nitrogen	59	28.013	126.19	32.931	0.09000	0.09015	0.04000
TEGlycol	132	150.169	727.00	13.173	0.44600	0.34893	0.68997
n-C11	133	156.313	638.30	18.636	0.66000	0.68651	0.53500

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Component Data

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
H2O	-0.65442	373.15	997.99	8.775	-1.03219e+002	3.44899e+001
CO2	0.23725	194.60	825.34	8.541	5.51244e-008	2.72041e+001
H2S	0.09300	213.50	788.41	9.222	-4.88991e+001	3.40249e+001
Methane	0.00740	111.63	299.39	19.563	-2.08237e+002	3.79349e+001
Ethane	0.09830	184.55	355.68	19.471	-5.31486e+001	3.43669e+001
Propane	0.15320	231.05	506.68	14.732	1.74134e+003	1.74183e+001
i-Butane	0.18250	261.42	561.97	13.841	1.79621e+003	8.91041e+000
n-Butane	0.20080	272.65	583.22	13.525	3.93622e+003	4.96413e-001
i-Pentane	0.23995	301.03	623.44	13.077	4.63570e+003	-9.50936e+000
n-Pentane	0.25220	309.21	629.73	13.062	4.55980e+003	-8.44289e-001
n-Hexane	0.30070	341.88	662.66	12.836	6.42137e+003	-8.33315e+000
n-Heptane	0.35069	371.58	686.82	12.733	7.15564e+003	-9.70935e+000
n-Octane	0.39980	398.82	705.38	12.694	1.44512e+004	-3.08541e+001
n-Nonane	0.44780	423.97	720.25	12.688	6.38566e-007	-8.37397e+000
n-Decane	0.49160	447.30	732.72	12.696	1.04362e-006	-7.91297e+000
Nitrogen	0.03580	77.35	806.37	6.427	-4.49048e+001	2.97414e+001
TEGlycol	-0.45581	550.40	1128.45	8.834	0.00000e+000	-1.08446e+001
n-C11	0.54220	469.04	742.85	12.723	6.42209e-007	-8.39498e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Component Data

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
H2O	-7.12930e-003	1.57849e-005	-8.91847e-009	1.87080e-012	1.00000e+000	-0.86778
CO2	2.13220e-002	-6.57298e-006	1.00804e-009	-6.03131e-014	1.00000e+000	-0.00038
H2S	-6.28021e-003	1.89829e-005	-1.08262e-008	2.16936e-012	1.00000e+000	0.38727
Methane	-3.42110e-002	9.08317e-005	-5.97560e-008	1.38113e-011	1.00000e+000	-0.00201
Ethane	-9.73062e-003	1.27590e-004	-1.02032e-007	2.65245e-011	1.00000e+000	0.07231
Propane	9.32250e-002	1.74838e-005	-2.94205e-008	7.40547e-012	1.00000e+000	0.07112
i-Butane	1.53145e-001	4.22693e-006	-4.23082e-008	1.37600e-011	1.00000e+000	0.10784
n-Butane	1.90472e-001	-6.44990e-005	1.02674e-008	-3.71951e-013	1.00000e+000	0.10006
i-Pentane	2.55487e-001	-9.61917e-005	1.81421e-008	-9.34904e-013	1.00000e+000	0.03229
n-Pentane	2.39282e-001	-8.44528e-005	1.44039e-008	-6.25178e-013	1.00000e+000	0.12425
n-Hexane	2.99597e-001	-1.13858e-004	2.17483e-008	-1.16052e-012	1.00000e+000	0.09727
n-Heptane	3.48012e-001	-1.33293e-004	2.56290e-008	-1.38008e-012	1.00000e+000	0.05282
n-Octane	4.56733e-001	-2.25380e-004	7.11432e-008	-1.07165e-011	1.00000e+000	0.04179
n-Nonane	4.36450e-001	-1.60766e-004	2.57743e-008	-2.86971e-021	1.00000e+000	0.08284
n-Decane	4.80447e-001	-1.76266e-004	2.82743e-008	-5.26655e-021	1.00000e+000	0.09464
Nitrogen	-3.07135e-003	4.76602e-006	-1.16995e-009	-1.01437e-013	1.00000e+000	0.12115
TEGlycol	4.02138e-001	1.09708e-018	-9.00573e-022	3.03264e-025	1.00000e+000	-0.17213
n-C11	5.27000e-001	-1.93300e-004	3.09243e-008	-3.26329e-021	1.00000e+000	0.09020

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Data

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
H2O	-1.10669	Misc	0.0
CO2	-0.31474	Misc	0.0
H2S	0.35719	Misc	-518000.0
Methane	0.02547	HC	-802703.0
Ethane	0.04698	HC	-1428510.0
Propane	-0.06538	HC	-2044970.0
i-Butane	-0.14528	HC	-2652850.0
n-Butane	-0.05969	HC	-2659600.0
i-Pentane	-0.18757	HC	-3265570.0
n-Pentane	-0.03341	HC	-3273500.0
n-Hexane	-0.10756	HC	-3888500.0
n-Heptane	-0.20281	HC	-4503500.0
n-Octane	-0.25551	HC	-5118500.0
n-Nonane	-0.24232	HC	-5733550.0
n-Decane	-0.26298	HC	-6348600.0
Nitrogen	0.02163	Misc	0.0
TEGlycol	-1.24694	Alcohol	-3249800.0
n-C11	-0.29723	HC	-6963610.0

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :

Scenario Data

Name	System Back Pres. (bar_g)	Ambient Temperature (C)	Header Mach No.	Header Vap. Vel. (m/s)	Header Liq. Vel. (m/s)	Header Rho V2 (kg/m/s2)	Header Noise (dB)	Tailpipe Mach No.
Default Scenario	0.03675	18.75	0.7000			150000	100.0	0.7000
BDV-Fire case	0.08675	33.00	0.7000			150000	100.0	0.7000
Spurious blowdown case	0.08675	18.75	0.7000			150000	100.0	0.7000
Cold shutdown case	0.08675	18.75	0.7000			150000	100.0	0.7000
FIRE-AREA 1	0.08675	33.00	0.7000			150000	100.0	0.7000
FIRE-AREA 2	0.08675	33.00	0.7000			150000	100.0	0.7000
FIRE-AREA 3	0.08675	33.00	0.7000			150000	100.0	0.7000
BLOCK OUTLET-PSV-2...	0.08675	18.75	0.7000			150000	100.0	0.7000
BLOCK OUTLET PSV-2...	0.08675	18.75	0.7000			150000	100.0	0.7000
PCV-2152	0.08675	18.75	0.7000			150000	100.0	0.7000
PSV-2113 BLOCKED O...	0.08675	18.75	0.7000			150000	100.0	0.7000
PSV-2141/2142 BLOCK...	0.08675	33.00	0.7000			150000	100.0	0.7000
PSV-2111/2112 BLOCK...	0.08675	33.00	0.7000			150000	100.0	0.7000
XV-2110-fire case	0.08675	18.75	0.7000			150000	100.0	0.7000
XV-2110-COLD SHUT...	0.08675	18.75	0.7000			150000	100.0	0.7000
XV-2110 Spurious blow...	0.08675	18.75	0.7000			150000	100.0	0.7000
PSV-2113/2114 BLOKE...	0.08675	18.75	0.7000			150000	100.0	0.7000
PCV-2135 A/B	0.08675	18.75	0.7000			150000	100.0	0.7000
PSV-2293 FIRE	0.08675	18.75	0.7000			150000	100.0	0.7000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Scenario Data

Name	Tailpipe Vap. Vel. (m/s)	Tailpipe Liq. Vel. (m/s)	Tailpipe Rho V2 (kg/m/s2)	Tailpipe Noise (dB)
Default Scenario			150000	100.0
BDV-Fire case			150000	100.0
Spurious blowdown case			150000	100.0
Cold shutdown case			150000	100.0
FIRE-AREA 1			150000	100.0
FIRE-AREA 2			150000	100.0
FIRE-AREA 3			150000	100.0
BLOCK OUTLET-PSV-2...			150000	100.0
BLOCK OUTLET PSV-2...			150000	100.0
PCV-2152			150000	100.0
PSV-2113 BLOCKED O...			150000	100.0
PSV-2141/2142 BLOCK...			150000	100.0
PSV-2111/2112 BLOCK...			150000	100.0
XV-2110-fire case			150000	100.0
XV-2110-COLD SHUT...			150000	100.0
XV-2110 Spurious blow...			150000	100.0
PSV-2113/2114 BLOKE...			150000	100.0
PCV-2135 A/B			150000	100.0
PSV-2293 FIRE			150000	100.0

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
Methane	1	16.043	190.70	46.40700	0.09900	0.09939	0.01150
Ethane	2	30.070	305.43	48.83900	0.14800	0.14575	0.09860
Propane	3	44.097	369.90	42.56700	0.20000	0.20008	0.15240
i-Butane	4	58.124	408.10	36.47600	0.26300	0.25683	0.18479
n-Butane	5	58.124	425.20	37.96600	0.25499	0.25439	0.20100
i-Pentane	6	72.151	460.40	33.33600	0.30799	0.30959	0.22224
n-Pentane	7	72.151	469.60	33.75100	0.31099	0.31132	0.25389
22-Mpropane	8	72.151	433.78	31.98800	0.30300	0.31257	0.19640
n-Hexane	9	86.178	507.90	30.31600	0.36800	0.36820	0.30070
2-Mpentane	10	86.178	497.50	30.10400	0.36636	0.36770	0.27910
3-Mpentane	11	86.178	504.45	31.23800	0.36636	0.36333	0.27500
22-Mbutane	12	86.178	504.45	38.80600	0.35899	0.36338	0.23194
23-Mbutane	13	86.178	499.98	31.26900	0.35800	0.36100	0.24695
n-Heptane	14	100.205	540.16	27.36800	0.42598	0.43044	0.34979
2-Mhexane	15	100.205	530.37	27.33600	0.42100	0.42737	0.34000
3-Mhexane	16	100.205	535.25	28.13800	0.40400	0.42313	0.32699
3-Epentane	17	100.205	540.64	28.90800	0.41600	0.41633	0.31400
22-Mpentane	18	100.205	520.50	27.73300	0.41600	0.42250	0.30000
24-Mpentane	19	100.205	519.79	27.36800	0.41800	0.42513	0.30700
33-Mpentane	20	100.205	536.40	29.45500	0.41400	0.41370	0.28700
23-Mpentane	21	100.205	537.35	29.08000	0.39300	0.41271	0.30500
n-Octane	22	114.232	568.60	24.96600	0.48600	0.49042	0.40180
2233-Mbutane	23	114.232	567.95	28.67400	0.46099	0.45691	0.24670
25-Mhexane	24	114.232	550.06	24.86500	0.48199	0.48581	0.34599
n-Nonane	25	128.259	594.60	23.00100	0.54299	0.55290	0.44549
n-Decane	26	142.285	617.60	21.07600	0.60197	0.61922	0.48848
Cyclopentane	27	70.135	511.60	45.09000	0.25999	0.26001	0.19200
Mcyclopentan	28	84.162	532.70	37.89600	0.31900	0.31812	0.23894
Cyclohexane	29	84.160	553.20	40.53000	0.30799	0.30899	0.21330
Mcyclohexane	30	98.189	572.10	34.75400	0.36800	0.37090	0.23296
Ethylene	31	28.054	282.36	50.31800	0.12894	0.13097	0.08500
Propene	32	42.081	365.00	46.20400	0.18095	0.18287	0.14800
1-Butene	33	56.108	419.60	40.22600	0.23995	0.23770	0.18700
cis2-Butene	34	56.108	435.58	42.05800	0.23394	0.23104	0.20295
tr2-Butene	35	56.108	428.63	41.02400	0.23815	0.23668	0.21818
i-Butene	36	56.108	417.90	40.02300	0.23894	0.23690	0.18998
1-Pentene	37	70.135	464.70	40.53000	0.30000	0.29510	0.23296
12-Butadiene	38	54.092	443.70	44.98800	0.21897	0.21829	0.25499
13-Butadiene	39	54.092	425.00	43.26600	0.22100	0.22020	0.19494
2M-13-C4==	40	68.119	484.26	38.50000	0.27636	0.26910	0.15860
Acetylene	41	26.038	308.32	61.39100	0.11296	0.16741	0.18727
Benzene	42	78.110	562.10	49.24400	0.25999	0.27438	0.21500
Toluene	43	92.141	591.80	41.00000	0.31600	0.31369	0.25960
E-Benzene	44	106.166	617.10	36.07100	0.37400	0.37020	0.30098
o-Xylene	45	106.166	630.37	37.32800	0.36912	0.36733	0.30230
m-Xylene	46	106.166	617.05	35.41100	0.37573	0.37312	0.32600
p-Xylene	47	106.166	616.26	35.10800	0.37906	0.37400	0.32589
Styrene	48	104.152	647.55	39.99300	0.36899	0.34819	0.24007
Cumene	49	120.194	631.15	32.08800	0.42763	0.42713	0.33770

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
Methane	0.00740	111.63	299.39	19.56	-2.08237e+002	3.79349e+001
Ethane	0.09830	184.55	355.68	19.47	-5.31486e+001	3.43669e+001
Propane	0.15320	231.05	506.68	14.73	1.74134e+003	1.74183e+001
i-Butane	0.18250	261.42	561.97	13.84	1.79621e+003	8.91041e+000
n-Butane	0.20080	272.65	583.22	13.53	3.93622e+003	4.96413e-001
i-Pentane	0.23995	301.03	623.44	13.08	4.63570e+003	-9.50936e+000
n-Pentane	0.25220	309.21	629.73	13.06	4.55980e+003	-8.44289e-001
22-Mpropane	0.19750	282.65	595.59	13.40	0.00000e+000	-1.58624e+000
n-Hexane	0.30070	341.88	662.66	12.84	6.42137e+003	-8.33315e+000
2-Mpentane	0.27910	333.41	656.51	12.85	9.60625e+003	-5.21980e+001
3-Mpentane	0.27410	336.42	667.68	12.67	7.22352e+003	-1.46072e+001
22-Mbutane	0.23296	322.88	652.57	12.79	0.00000e+000	-1.66323e+001
23-Mbutane	0.24770	331.13	665.17	12.65	0.00000e+000	-1.46072e+001
n-Heptane	0.35069	371.58	686.82	12.73	7.15564e+003	-9.70935e+000
2-Mhexane	0.33100	363.20	681.54	12.73	4.78358e+003	-1.25256e+001
3-Mhexane	0.32429	365.00	690.20	12.60	1.96113e-006	-5.61900e+000
3-Epentane	0.31180	366.62	701.17	12.42	7.87671e+003	1.54915e+001
22-Mpentane	0.28819	352.34	676.97	12.69	7.78453e+003	2.15940e+001
24-Mpentane	0.30399	353.64	675.99	12.73	7.60805e+003	2.23146e+001
33-Mpentane	0.26809	359.21	696.33	12.42	8.28584e+003	1.55909e+001
23-Mpentane	0.29730	362.93	698.05	12.43	8.01700e+003	1.58322e+001
n-Octane	0.39980	398.82	705.38	12.69	1.44512e+004	-3.08541e+001
2233-Mbutane	0.25130	379.62	741.12	11.89	1.22603e+004	2.72156e+000
25-Mhexane	0.35558	382.26	696.67	12.67	6.75522e+003	2.39312e+001
n-Nonane	0.44780	423.97	720.25	12.69	6.38566e-007	-8.37397e+000
n-Decane	0.49160	447.30	732.72	12.70	1.04362e-006	-7.91297e+000
Cyclopentane	0.19686	322.40	748.87	11.14	1.09549e-006	-5.36195e+001
Mcyclopentan	0.23217	344.96	752.07	11.34	1.07088e+004	-5.75752e+001
Cyclohexane	0.21277	353.88	781.82	11.01	3.83405e-007	-5.45399e+001
Mcyclohexane	0.23710	374.08	772.43	11.35	1.05642e+004	-6.91837e+001
Ethylene	0.08820	169.40	383.23	17.56	3.14225e-008	3.18972e+001
Propene	0.14550	225.40	520.96	14.21	8.10738e-007	3.70998e+000
1-Butene	0.19210	266.90	593.79	13.19	4.65739e-007	-2.99399e+000
cis2-Butene	0.20385	276.87	625.95	12.67	3.04059e-007	4.39599e-001
tr2-Butene	0.21525	274.03	608.68	12.98	1.50575e-006	1.83192e+001
i-Butene	0.19584	266.30	592.79	13.20	1.13102e-006	1.60496e+001
1-Pentene	0.28240	303.10	638.72	12.79	-1.01301e-006	-1.33993e-001
12-Butadiene	0.24920	283.00	650.70	12.27	1.25411e+003	2.51311e+001
13-Butadiene	0.19336	268.70	619.74	12.67	2.55346e+003	3.24161e+000
2M-13-C4==	0.17000	307.20	684.85	11.99	9.44061e+003	3.81589e+000
Acetylene	0.20487	189.35	417.05	16.75	1.41140e-008	2.68197e+001
Benzene	0.48891	353.24	882.19	9.75	6.59762e+003	-4.00937e+001
Toluene	0.26510	383.80	870.04	10.16	6.83335e+003	-3.89848e+001
E-Benzene	0.30480	409.35	870.03	10.38	7.49022e+003	-4.16171e+001
o-Xylene	0.31180	417.58	883.15	10.30	3.45199e+003	-6.64472e+000
m-Xylene	0.32699	412.27	866.88	10.44	1.76757e-006	-2.91690e+001
p-Xylene	0.32159	411.51	864.23	10.47	4.56832e+003	-1.33650e+001
Styrene	0.24199	418.31	909.31	10.01	3.35812e+005	4.06453e+001
Cumene	0.32769	425.56	864.76	10.58	7.06236e+003	-4.26448e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
Methane	-3.42110e-002	9.08317e-005	-5.97560e-008	1.38113e-011	1.00000e+000	-0.00201
Ethane	-9.73062e-003	1.27590e-004	-1.02032e-007	2.65245e-011	1.00000e+000	0.07231
Propane	9.32250e-002	1.74838e-005	-2.94205e-008	7.40547e-012	1.00000e+000	0.07112
i-Butane	1.53145e-001	4.22693e-006	-4.23082e-008	1.37600e-011	1.00000e+000	0.10784
n-Butane	1.90472e-001	-6.44990e-005	1.02674e-008	-3.71951e-013	1.00000e+000	0.10006
i-Pentane	2.55487e-001	-9.61917e-005	1.81421e-008	-9.34904e-013	1.00000e+000	0.03229
n-Pentane	2.39282e-001	-8.44528e-005	1.44039e-008	-6.25178e-013	1.00000e+000	0.12425
22-Mpropane	2.37052e-001	-6.28533e-005	-6.54666e-009	5.26144e-012	1.00000e+000	0.18716
n-Hexane	2.99597e-001	-1.13858e-004	2.17483e-008	-1.16052e-012	1.00000e+000	0.09727
2-Mpentane	4.24021e-001	-2.59999e-004	9.17846e-008	-9.30945e-012	1.00000e+000	0.10271
3-Mpentane	3.16962e-001	-1.34257e-004	3.04893e-008	-1.52687e-012	1.00000e+000	0.00284
22-Mbutane	3.14636e-001	-2.08844e-004	5.54793e-008	-6.96140e-026	1.00000e+000	-0.02493
23-Mbutane	3.07516e-001	-2.02543e-004	5.52413e-008	3.48070e-026	1.00000e+000	0.03703
n-Heptane	3.48012e-001	-1.33293e-004	2.56290e-008	-1.38008e-012	1.00000e+000	0.05282
2-Mhexane	3.60998e-001	-1.28232e-004	9.88358e-009	2.32311e-012	1.00000e+000	0.06828
3-Mhexane	3.38462e-001	-1.21314e-004	1.85181e-008	-1.08975e-020	1.00000e+000	-0.07379
3-Epentane	2.83538e-001	-6.78564e-005	4.14438e-022	-4.04725e-026	1.00000e+000	-0.02363
22-Mpentane	2.82528e-001	-6.69596e-005	-7.25267e-022	-7.08268e-026	1.00000e+000	0.09285
24-Mpentane	2.82506e-001	-6.69215e-005	-1.18115e-021	6.07087e-026	1.00000e+000	0.00282
33-Mpentane	2.83359e-001	-6.76831e-005	-1.24332e-021	2.32717e-025	1.00000e+000	0.26341
23-Mpentane	2.83430e-001	-6.77452e-005	3.12901e-021	-6.17205e-025	1.00000e+000	0.12703
n-Octane	4.56733e-001	-2.25380e-004	7.11432e-008	-1.07165e-011	1.00000e+000	0.04179
2233-Mbutane	3.24979e-001	-7.88984e-005	1.29924e-021	-3.57569e-025	1.00000e+000	0.01343
25-Mhexane	3.23037e-001	-7.71713e-005	-2.36226e-023	-2.30690e-026	1.00000e+000	0.05909
n-Nonane	4.36450e-001	-1.60766e-004	2.57743e-008	-2.86971e-021	1.00000e+000	0.08284
n-Decane	4.80447e-001	-1.76266e-004	2.82743e-008	-5.26655e-021	1.00000e+000	0.09464
Cyclopentane	2.71300e-001	-1.01033e-004	1.62122e-008	-5.79391e-021	1.00000e+000	0.10424
Mcyclopentan	3.37111e-001	-1.41518e-004	3.01153e-008	-2.21073e-012	1.00000e+000	0.05309
Cyclohexane	3.05648e-001	-8.40997e-005	3.30246e-009	-2.17284e-021	1.00000e+000	-0.08034
Mcyclohexane	4.02899e-001	-1.50082e-004	1.80075e-008	2.61513e-012	1.00000e+000	0.01561
Ethylene	-6.86252e-003	8.19438e-005	-5.91265e-008	1.36161e-011	1.00000e+000	0.03259
Propene	1.17249e-001	-3.86663e-005	5.51222e-009	-4.41758e-021	1.00000e+000	-0.11885
1-Butene	1.76599e-001	-6.63317e-005	1.11572e-008	-2.39836e-021	1.00000e+000	0.03680
cis2-Butene	1.47650e-001	-3.39330e-005	-1.53997e-010	-1.56620e-021	1.00000e+000	-0.02775
tr2-Butene	1.28199e-001	-2.33764e-005	-2.24722e-009	-8.31469e-021	1.00000e+000	0.02474
i-Butene	1.40199e-001	-3.63664e-005	2.27447e-009	-6.13432e-021	1.00000e+000	0.00261
1-Pentene	2.16450e-001	-7.72327e-005	1.17022e-008	5.62232e-021	1.00000e+000	-0.03525
12-Butadiene	9.48175e-002	2.59536e-007	-1.79556e-008	4.82448e-012	1.00000e+000	-0.15081
13-Butadiene	1.52701e-001	-4.73063e-005	-2.11881e-009	3.25311e-012	1.00000e+000	-0.08362
2M-13-C4==	1.92300e-001	-4.57211e-005	3.25402e-021	-7.01583e-025	1.00000e+000	-0.07588
Acetylene	3.78895e-002	-1.66899e-005	3.52989e-009	-8.64733e-023	1.00000e+000	0.32218
Benzene	2.53755e-001	-1.20578e-004	2.85106e-008	-1.93872e-012	1.00000e+000	-0.16332
Toluene	2.93422e-001	-1.32655e-004	3.00928e-008	-1.96026e-012	1.00000e+000	-0.05580
E-Benzene	3.51282e-001	-1.62190e-004	3.78000e-008	-2.53457e-012	1.00000e+000	-0.04854
o-Xylene	2.67422e-001	-6.97114e-005	-1.19272e-008	7.95752e-012	1.00000e+000	-0.08176
m-Xylene	3.14848e-001	-1.24899e-004	2.11946e-008	-9.72564e-021	1.00000e+000	-0.03405
p-Xylene	2.64066e-001	-5.67920e-005	-2.12857e-008	1.01404e-011	1.00000e+000	-0.05246
Styrene	1.22591e-001	9.39214e-005	-1.06390e-007	2.86743e-011	1.00000e+000	-0.18218
Cumene	4.02398e-001	-1.81433e-004	4.10830e-008	-2.69158e-012	1.00000e+000	-0.11783

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
Methane	0.02547	HC	-802703
Ethane	0.04698	HC	-1428510
Propane	-0.06538	HC	-2044970
i-Butane	-0.14528	HC	-2652850
n-Butane	-0.05969	HC	-2659600
i-Pentane	-0.18757	HC	-3265570
n-Pentane	-0.03341	HC	-3273500
22-Mpropane	-0.13706	HC	-3254070
n-Hexane	-0.10756	HC	-3888500
2-Mpentane	-0.09124	HC	-3851400
3-Mpentane	-0.21389	HC	-3884050
22-Mbutane	-0.26234	HC	-3870080
23-Mbutane	-0.24138	HC	-3877900
n-Heptane	-0.20281	HC	-4503500
2-Mhexane	-0.17382	HC	-4496340
3-Mhexane	-0.33272	HC	-4498990
3-Epentane	-0.24355	HC	-4501610
22-Mpentane	-0.17440	HC	-4485080
24-Mpentane	-0.26704	HC	-4489230
33-Mpentane	0.02743	HC	-4489760
23-Mpentane	-0.10683	HC	-4492060
n-Octane	-0.25551	HC	-5118500
2233-Mbutane	-0.25589	HC	5101000
25-Mhexane	-0.23589	HC	-5104280
n-Nonane	-0.24232	HC	-5733550
n-Decane	-0.26298	HC	-6348600
Cyclopentane	-0.18035	HC	-3100940
Mcyclopentan	-0.25804	HC	-3707100
Cyclohexane	-0.63384	HC	-3690650
Mcyclohexane	-0.34615	HC	-4294600
Ethylene	-0.02275	HC	-1323570
Propene	-0.20261	HC	-1927350
1-Butene	-0.06031	HC	-2543740
cis2-Butene	-0.09303	HC	-2536870
tr2-Butene	-0.05633	HC	-2532500
i-Butene	-0.16493	HC	-2524197
1-Pentene	-0.13197	HC	-3157290
12-Butadiene	-0.22495	HC	
13-Butadiene	-0.21559	HC	
2M-13-C4==	-0.18139	HC	
Acetylene	0.24670	HC	-1256200
Benzene	-0.49827	HC	-3170970
Toluene	-0.26030	HC	-3773650
E-Benzene	-0.21085	HC	-4389140
o-Xylene	-0.32466	HC	-4378300
m-Xylene	-0.21513	HC	-4376540
p-Xylene	-0.25042	HC	-4377250
Styrene	-0.36794	HC	-4219000
Cumene	-0.36739	HC	-4998850

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
Methanol	50	32.042	512.60	73.76500	0.12700	0.10989	0.55699
Ethanol	51	46.070	513.90	61.47000	0.16708	0.13812	0.64437
CO	52	28.011	132.95	34.98800	0.08930	0.09214	0.09300
CO2	53	44.010	304.10	73.70000	0.09390	0.09383	0.23894
H2S	54	34.076	373.60	90.07800	0.09800	0.09939	0.08100
SO2	55	64.063	430.80	78.70000	0.12217	0.12522	0.25600
Ammonia	56	17.030	405.55	112.76900	0.08040	0.07010	0.25500
Hydrogen	57	2.016	33.44	13.15500	0.05150	0.06424	-0.12009
Oxygen	58	32.000	154.77	50.80000	0.07320	0.07379	0.01900
Nitrogen	59	28.013	126.19	33.94400	0.09000	0.09015	0.04000
Cl2	60	70.906	416.90	77.40000	0.12380	0.13457	0.09000
H2O	61	18.015	647.30	221.20000	0.05710	0.04357	0.34400
Helium	62	4.003	5.19	2.27000	0.05730	0.05457	0.00000
HCl	63	36.461	324.70	83.00000	0.08090	0.08270	0.13300
MEAmine	64	61.084	612.00	44.50000	0.19596	0.20904	0.79657
TEAmine	65	149.190	787.43	24.47600	0.44001	0.52345	0.98299
diEthylamine	66	73.139	496.50	37.10000	0.30098	0.29183	0.29100
DGAmine	67	105.138	675.70	37.70000	0.32600	0.36496	0.87089
MDEAmine	68	119.160	677.00	37.00000	0.31334	0.43878	0.99699
1-Propanol	69	60.096	536.80	51.70000	0.21897	0.23623	0.62300
2-Propanol	70	60.096	508.30	47.60000	0.21999	0.23883	0.66500
1-Butanol	71	74.123	563.10	44.20000	0.27500	0.28409	0.59298
2-Butanol	72	74.123	536.10	41.70000	0.26899	0.28029	0.57700
i-Butanol	73	74.123	547.80	42.00000	0.27300	0.27300	0.59200
tert-Butanol	74	74.123	506.20	39.70000	0.27500	0.28760	0.61198
1-Pentanol	75	88.150	588.20	39.10000	0.32600	0.34369	0.57898
2-Pentanol	76	88.149	552.00	38.70000	0.32699	0.35699	0.67460
3-Pentanol	77	88.149	547.00	38.70000	0.32699	0.34340	0.67483
2-M-1-C4ol	78	88.150	571.00	45.60000	0.33000	0.34070	0.67839
3-M-2-C4ol	79	88.149	572.00	39.60000	0.32699	0.32236	0.35095
3-M-1-C4ol	80	88.150	579.40	39.20000	0.33000	0.34130	0.55576
2-M-2-C4ol	81	88.150	545.00	39.50000	0.33000	0.33129	0.48311
22-M-1-C3ol	82	88.150	547.00	39.20000	0.33000	0.35686	0.60355
cycPentanol	83	86.130	577.58	43.85800	0.31050	0.30636	0.77378
cycHexanol	84	100.160	625.00	37.50000	0.34400	0.33770	0.52798
1-Hexanol	85	102.177	611.00	34.70000	0.38100	0.40325	0.56000
BZol	86	108.138	720.20	44.00000	0.30000	0.35710	0.39489
1-Heptanol	87	116.204	632.00	31.60000	0.43500	0.46151	0.56000
2-Heptanol	88	116.203	587.00	30.30000	0.43200	0.48087	0.76270
Acetone	89	58.080	508.10	47.00000	0.20900	0.20983	0.30399
M-E-Ketone	90	72.107	536.80	42.10000	0.26699	0.25229	0.31999
Formaldehyde	91	30.026	407.00	65.90000	0.10497	0.10819	0.25299
AcetAldehyde	92	44.054	461.00	55.70000	0.15399	0.15309	0.30300
Propanal	93	58.080	496.00	47.60000	0.22300	0.20313	0.31299
n-Butanal	94	72.107	545.40	53.70000	0.27799	0.26418	0.29629
i-Butanal	95	72.107	512.00	41.50000	0.27399	0.26254	0.32128
n-Pentanal	96	86.134	552.00	35.20000	0.33300	0.31911	0.40000
BZal	97	106.124	694.80	46.50000	0.32400	0.31828	0.30500
M-Formate	98	60.052	487.20	60.00000	0.17200	0.16931	0.25698

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
Methanol	0.11491	337.80	795.72	10.65	0.00000e+000	2.11541e+001
Ethanol	-0.49754	351.40	795.98	10.78	0.00000e+000	9.01910e+000
CO	0.02950	81.70	799.39	6.60	-6.35567e+001	3.00809e+001
CO2	0.23725	194.60	825.34	8.54	5.51244e-008	2.72041e+001
H2S	0.09300	213.50	788.41	9.22	-4.88991e+001	3.40249e+001
SO2	0.25600	263.20	1395.56	5.59	-1.35786e-007	2.38494e+001
Ammonia	0.26200	239.70	616.07	12.27	-3.15293e+001	3.39527e+001
Hydrogen	-0.23240	20.56	69.86	47.70	-7.33713e+000	1.96064e+001
Oxygen	0.02980	90.20	1137.68	4.80	-7.30688e+001	3.04640e+001
Nitrogen	0.03580	77.35	806.37	6.43	-4.49048e+001	2.97414e+001
Cl2	0.08220	239.20	1419.56	5.32	0.00000e+000	2.69477e+001
H2O	-0.65442	373.15	997.99	8.78	-1.03219e+002	3.44899e+001
Helium	-0.47659	4.21	124.06	15.83	3.65540e+001	2.07987e+001
HCl	0.12540	188.10	870.33	8.01	0.00000e+000	3.06831e+001
MEAmine	0.79657	443.50	1016.97	9.12	0.00000e+000	9.31530e+000
TEAmine	0.98299	633.15	1124.00	9.29	0.00000e+000	-1.58705e+001
diEthylamine	0.30450	328.60	707.00	11.87	0.00000e+000	2.04028e+000
DGAmine	0.87089	494.30	1057.00	9.10	0.00000e+000	6.32541e+001
MDEAmine	0.99699	520.40	1040.00	9.41	0.00000e+000	4.91714e+001
1-Propanol	0.62489	370.30	804.00	10.87	0.00000e+000	2.47163e+000
2-Propanol	0.66368	355.40	785.00	10.98	0.00000e+000	3.24320e+001
1-Butanol	0.59280	390.90	813.87	10.93	0.00000e+000	3.26785e+000
2-Butanol	0.57920	372.70	813.87	10.76	0.00000e+000	5.75677e+000
i-Butanol	0.58828	381.00	804.23	10.97	0.00000e+000	-7.71250e+000
tert-Butanol	0.61339	355.50	781.26	11.03	0.00000e+000	-4.86291e+001
1-Pentanol	0.59750	411.10	819.53	11.04	0.00000e+000	3.87150e+000
2-Pentanol	0.67460	392.15	814.41	10.93	0.00000e+000	2.29773e+000
3-Pentanol	0.70937	388.45	827.54	10.73	0.00000e+000	-7.42554e+000
2-M-1-C4ol	0.61080	401.90	821.56	10.93	0.00000e+000	-9.48847e+000
3-M-2-C4ol	0.35095	384.65	822.96	10.75	0.00000e+000	-3.15279e-001
3-M-1-C4ol	0.56290	405.20	820.68	10.97	0.00000e+000	-9.53783e+000
2-M-2-C4ol	0.50068	375.50	813.54	10.79	0.00000e+000	-1.20975e+001
22-M-1-C3ol	0.60355	386.30	782.00	11.33	0.00000e+000	1.21558e+001
cycPentanol	0.77378	413.95	952.71	9.52	0.00000e+000	-3.88643e+001
cycHexanol	0.52960	434.30	961.93	9.58	0.00000e+000	-5.55638e+001
1-Hexanol	0.56000	430.20	822.93	11.16	0.00000e+000	4.81387e+000
BZol	0.72310	478.60	1047.31	9.09	0.00000e+000	-7.40249e+000
1-Heptanol	0.56000	449.80	826.56	11.28	0.00000e+000	4.90888e+001
2-Heptanol	0.76270	432.35	821.44	11.20	1.79434e-006	4.90689e+001
Acetone	0.31490	329.20	790.00	10.63	0.00000e+000	6.30447e+000
M-E-Ketone	0.31880	352.70	809.04	10.62	0.00000e+000	1.09457e+001
Formaldehyde	0.26559	253.00	752.45	10.23	0.00000e+000	2.34955e+001
AcetAldehyde	0.26469	293.00	777.00	10.40	0.00000e+000	7.72042e+000
Propanal	0.31299	321.00	807.89	10.31	0.00000e+000	1.17273e+001
n-Butanal	0.35199	348.00	807.60	10.60	0.00000e+000	1.40890e+001
i-Butanal	0.34999	337.00	793.90	10.66	0.00000e+000	2.44760e+001
n-Pentanal	0.40000	376.00	813.02	10.80	0.00000e+000	1.42483e+001
BZal	0.31600	451.90	1048.39	8.90	0.00000e+000	-1.21457e+001
M-Formate	0.25698	304.90	981.24	8.34	0.00000e+000	1.43294e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
Methanol	3.54768e-002	8.62747e-006	-7.13272e-009	-1.45593e-026	1.00000e+000	-0.08319
Ethanol	1.07121e-001	-2.79855e-005	3.43469e-010	-1.60490e-025	1.00000e+000	-0.04704
CO	-4.83608e-003	8.46562e-006	-3.85223e-009	5.61215e-013	1.00000e+000	0.03398
CO2	2.13220e-002	-6.57298e-006	1.00804e-009	-6.03131e-014	1.00000e+000	-0.00038
H2S	-6.28021e-003	1.89829e-005	-1.08262e-008	2.16936e-012	1.00000e+000	0.38727
SO2	3.34949e-002	-1.65364e-005	3.31997e-009	8.06787e-022	1.00000e+000	-0.10982
Ammonia	-9.07120e-003	3.51074e-005	-2.27957e-008	5.19970e-012	1.00000e+000	-0.13910
Hydrogen	2.67487e-002	-3.51978e-005	2.20341e-008	-5.09054e-012	1.00000e+000	-0.36739
Oxygen	-8.99613e-003	2.09666e-005	-1.44735e-008	3.48019e-012	1.00000e+000	0.10997
Nitrogen	-3.07135e-003	4.76602e-006	-1.16995e-009	-1.01437e-013	1.00000e+000	0.12115
Cl2	1.69309e-002	-1.29048e-005	3.86994e-009	5.63822e-026	1.00000e+000	0.41955
H2O	-7.12930e-003	1.57849e-005	-8.91847e-009	1.87080e-012	1.00000e+000	-0.86778
Helium	-3.63478e-017	1.42408e-019	-3.55125e-022	1.77847e-026	1.00000e+000	1.66270
HCl	-3.60278e-003	4.15588e-006	-9.75126e-010	-3.12936e-026	1.00000e+000	-0.06642
MEAmine	1.50550e-001	-6.06397e-005	1.16475e-008	5.55111e-026	1.00000e+000	0.45633
TEAmine	2.90764e-001	-1.00480e-004	6.71026e-022	-1.54410e-025	1.00000e+000	-0.50830
diEthylamine	2.21647e-001	-7.28122e-005	9.13812e-009	-4.43109e-025	1.00000e+000	-0.11309
DGAmine	1.91879e-001	-2.59708e-005	3.53129e-008	-5.30811e-025	1.00000e+000	0.21333
MDEAmine	2.79728e-001	-1.04459e-004	2.75442e-008	-3.85027e-025	1.00000e+000	-0.22638
1-Propanol	1.66359e-001	-6.18730e-005	1.07468e-008	-6.67496e-026	1.00000e+000	-0.08665
2-Propanol	9.43093e-002	2.13673e-005	-2.31677e-008	3.58021e-025	1.00000e+000	-0.32157
1-Butanol	2.09140e-001	-7.47812e-005	1.17200e-008	-2.99380e-026	1.00000e+000	-0.12199
2-Butanol	2.12388e-001	-7.76483e-005	1.19400e-008	1.64659e-025	1.00000e+000	-1.07500
i-Butanol	2.34606e-001	-9.61939e-005	1.80894e-008	-2.84411e-025	1.00000e+000	-0.37222
tert-Butanol	3.58812e-001	-2.36292e-004	7.30471e-008	-2.17051e-025	1.00000e+000	0.00485
1-Pentanol	2.52415e-001	-8.80220e-005	1.28081e-008	-8.90088e-026	1.00000e+000	-0.38855
2-Pentanol	2.67091e-001	-1.03524e-004	1.77355e-008	-6.23056e-026	1.00000e+000	-0.74597
3-Pentanol	2.88917e-001	-1.22996e-004	2.41729e-008	1.78016e-026	1.00000e+000	-0.40586
2-M-1-C4ol	2.84019e-001	-1.16109e-004	2.16063e-008	8.01079e-026	1.00000e+000	-0.50028
3-M-2-C4ol	2.70541e-001	-1.04397e-004	1.75242e-008	-1.51314e-025	1.00000e+000	-0.00545
3-M-1-C4ol	2.84240e-001	-1.16241e-004	2.16387e-008	-1.60216e-025	1.00000e+000	-0.35600
2-M-2-C4ol	3.05003e-001	-1.40226e-004	3.07200e-008	1.69117e-025	1.00000e+000	-0.76870
22-M-1-C3ol	2.70027e-001	-1.05401e-004	1.78164e-008	-8.18881e-025	1.00000e+000	-0.01304
cycPentanol	3.62433e-001	-2.32188e-004	6.86966e-008	-1.47847e-025	1.00000e+000	0.47564
cycHexanol	3.60927e-001	-1.36289e-004	2.06006e-008	-6.06815e-026	1.00000e+000	-0.40654
1-Hexanol	2.94745e-001	-1.00398e-004	1.35735e-008	1.03172e-026	1.00000e+000	-0.34593
BZol	2.74224e-001	-1.11968e-004	1.94394e-008	1.09192e-025	1.00000e+000	-0.43263
1-Heptanol	3.39126e-001	-1.14975e-004	1.51245e-008	-4.92811e-025	1.00000e+000	-0.49250
2-Heptanol	3.38899e-001	-1.14899e-004	1.51145e-008	-9.59980e-021	1.00000e+000	-0.02306
Acetone	1.30385e-001	-4.17933e-005	5.09826e-009	5.86458e-027	1.00000e+000	-0.00679
M-E-Ketone	1.78068e-001	-6.33741e-005	9.80626e-009	-1.45619e-026	1.00000e+000	-0.01799
Formaldehyde	1.57945e-002	9.95641e-006	-5.75360e-009	6.82162e-026	1.00000e+000	-0.16098
AcetAldehyde	9.12090e-002	-3.35873e-005	5.95372e-009	7.56214e-026	1.00000e+000	-0.14923
Propanal	1.30786e-001	-4.33617e-005	5.31833e-009	1.75937e-025	1.00000e+000	-0.12263
n-Butanal	1.72962e-001	-5.74689e-005	7.22195e-009	2.76676e-025	1.00000e+000	-0.03890
i-Butanal	1.67908e-001	-6.86120e-005	1.59302e-008	3.56766e-025	1.00000e+000	-0.00622
n-Pentanal	2.16592e-001	-7.02785e-005	7.90994e-009	-2.17433e-025	1.00000e+000	0.17317
BZal	2.48213e-001	-9.48930e-005	1.29252e-008	-4.82210e-026	1.00000e+000	0.46764
M-Formate	1.35088e-001	-6.50066e-005	1.42641e-008	-7.27641e-026	1.00000e+000	0.04140

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
Methanol	-0.54495	Alcohol	-638100
Ethanol	-0.77429	Alcohol	-1235470
CO	-0.13120	Misc	-283000
CO2	-0.31474	Misc	0
H2S	0.35719	Misc	-518000
SO2	-0.37720	Misc	0
Ammonia	-0.24700	Misc	-316830
Hydrogen	0.13233	Misc	-241820
Oxygen	0.10892	Misc	0
Nitrogen	0.02163	Misc	0
Cl2	0.41626	Halogen	
H2O	-1.10669	Misc	0
Helium	0.03833	Misc	0
HCl	-0.30864	Misc	-28601.8
MEAmine	-0.69080	Amine	-1363070
TEAmine	-1.58984	Amine	
diEthylamine	-0.45952	Amine	-2800300
DGAmine	-0.78241	Amine	-2449990
MDEAmine	-1.68570	Amine	-3060000
1-Propanol	-1.01443	Alcohol	-1843700
2-Propanol	-1.60107	Alcohol	-1829950
1-Butanol	-1.04665	Alcohol	-2455000
2-Butanol	-2.91142	Alcohol	-2440510
i-Butanol	-1.57535	Alcohol	-2448980
tert-Butanol	-1.22362	Alcohol	-2423870
1-Pentanol	-1.40899	Alcohol	-3060500
2-Pentanol	-1.96683	Alcohol	-3051520
3-Pentanol	-1.57587	Alcohol	-3048340
2-M-1-C4ol	-1.67832	Alcohol	-3062020
3-M-2-C4ol	-0.32839	Alcohol	-3052020
3-M-1-C4ol	-1.40725	Alcohol	-3062270
2-M-2-C4ol	-2.25652	Alcohol	-3039120
22-M-1-C3ol	-0.55405	Alcohol	-3099470
cycPentanol	0.44109	Alcohol	
cycHexanol	-1.81260	Alcohol	-3463850
1-Hexanol	-1.29164	Alcohol	-1
BZol	-0.98861	Alcohol	-3561300
1-Heptanol	-1.46322	Alcohol	-4288700
2-Heptanol	-0.66346	Alcohol	-4320000
Acetone	-0.19449	Ketone	-1659170
M-E-Ketone	-0.22743	Ketone	-2261620
Formaldehyde	-0.34880	Aldehyde	-519441
AcetAldehyde	-0.37325	Aldehyde	-1104620
Propanal	-0.50304	Aldehyde	-1685690
n-Butanal	-0.21578	Aldehyde	-2303450
i-Butanal	-0.29976	Aldehyde	-2291300
n-Pentanal	-0.15388	Aldehyde	-2910470
BZal	0.18671	Aldehyde	-3393130
M-Formate	-0.13865	Ester	-920897

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
VinylFormate	99	72.064	475.00	57.70000	0.20995	0.21894	0.55000
VinylAcetate	100	86.091	525.00	43.50000	0.26499	0.26690	0.34000
VinylCl	101	62.492	425.00	51.50000	0.17900	0.17215	0.12200
FormicAcid	102	46.025	570.00	55.00000	0.11200	0.11699	0.35249
AceticAcid	103	60.052	592.70	57.70000	0.17100	0.17407	0.44699
BZaicAcid	104	122.124	752.00	45.60000	0.34099	0.39298	0.62000
OleicAcid	105	282.467	770.00	13.90000	1.00000	1.02015	1.17820
F2	106	37.997	144.30	52.20000	0.06630	0.06690	0.05400
Bromine	107	159.807	588.00	103.00000	0.12720	0.14767	0.10800
Iodine	108	253.820	1092.15	117.53400	0.15500	0.19009	0.12300
Refrig-11	109	137.367	471.20	44.07600	0.24796	0.24603	0.19099
Refrig-12	110	120.913	385.00	41.23900	0.21694	0.21468	0.17599
Refrig-13	111	104.470	302.05	38.69900	0.18061	0.18061	0.17926
Refrig-21	112	102.916	451.58	51.83800	0.19596	0.20160	0.20690
Refrig-22	113	86.469	369.20	49.75000	0.16500	0.16369	0.21500
R134a	114	102.030	380.00	36.90000	0.20300	0.19739	0.23911
R-141b	115	116.946	482.88	43.85800	0.25250	0.25429	0.20546
R-142b	116	100.499	410.20	41.20000	0.23100	0.23729	0.23600
Refrig-40	117	50.488	416.30	67.00000	0.13887	0.13628	0.15297
Refrig-113	118	187.389	487.25	34.36000	0.32530	0.32629	0.24500
Refrig-500	119	99.310	378.55	44.27900	0.19458	0.24650	0.20630
Refrig-502	120	111.597	355.37	40.68100	0.19697	0.23126	0.22900
Phenol	121	94.113	694.20	61.20000	0.22900	0.28090	0.43799
o-E-Phenol	122	122.166	702.00	34.20000	0.40000	0.37852	0.38449
m-E-Phenol	123	122.166	718.80	41.50000	0.40000	0.39489	0.47453
p-E-Phenol	124	122.166	716.40	40.50000	0.40000	0.41411	0.52401
ETBE	125	102.180	517.11	31.14000	0.37850	0.38299	0.29173
MTBE	126	88.150	496.40	33.70000	0.33000	0.33037	0.26899
MSBE	127	88.150	500.08	34.31900	0.32750	0.33430	0.30819
diM-Ether	128	46.069	400.00	53.20000	0.17800	0.18366	0.20000
diE-Ether	129	74.123	466.70	36.20000	0.28000	0.28380	0.28099
EGlycol	130	62.069	702.00	65.15200	0.18600	0.21198	0.56000
DEGlycol	131	106.122	670.00	46.00000	0.31200	0.20214	1.20050
TEGlycol	132	150.169	727.00	14.18600	0.44600	0.34893	0.68997
n-C11	133	156.313	638.30	19.64900	0.66000	0.68651	0.53500
n-C12	134	170.339	658.30	18.29900	0.71297	0.75581	0.56199
n-C13	135	184.367	675.80	17.23500	0.77999	0.83173	0.62300
n-C14	136	198.380	694.00	16.20200	0.82999	0.90219	0.67900
n-C15	137	212.410	707.00	15.16800	0.87998	0.97724	0.70599
n-C16	138	226.429	717.00	14.20600	0.93997	1.05391	0.76498
n-C17	139	240.457	732.00	13.17200	1.00600	1.12083	0.76999
n-C18	140	254.479	745.00	12.13800	1.07000	1.19893	0.80000
n-C19	141	268.510	755.00	11.16600	1.13000	1.27153	0.82700
n-C20	142	282.540	768.00	11.60000	1.19000	1.37530	0.90690
n-C21	143	296.558	778.00	11.10000	1.24477	1.51365	0.94200
n-C22	144	310.588	787.00	10.60000	1.30113	1.58956	0.97220
n-C23	145	324.609	796.00	10.20000	1.35604	1.65594	1.02600
n-C24	146	338.639	804.00	9.80000	1.41112	1.72065	1.07100
n-C25	147	352.670	812.00	9.50000	1.46473	1.77467	1.10500

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
VinylFormate	0.55000	319.60	967.82	8.59	0.00000e+000	2.78281e+001
VinylAcetate	0.33618	346.00	937.53	9.11	0.00000e+000	2.16699e+001
VinylCl	0.12928	259.80	919.26	8.44	0.00000e+000	5.95287e+000
FormicAcid	0.46998	373.80	1225.18	7.15	0.00000e+000	1.17175e+001
AceticAcid	0.43099	391.10	1051.50	8.46	0.00000e+000	4.84318e+000
BZaicAcid	0.62000	523.00	1086.04	9.02	0.00000e+000	-5.12835e+001
OleicAcid	0.31633	632.00	893.43	11.68	9.94244e-005	-5.76699e+001
F2	0.04930	85.00	1500.00	3.57	0.00000e+000	2.32264e+001
Bromine	0.10800	331.90	3358.03	2.51	-2.60294e-007	3.38598e+001
Iodine	0.12300	457.50	4307.16	2.18	3.29271e-008	3.55602e+001
Refrig-11	0.18704	296.00	1495.00	5.42	0.00000e+000	4.09766e+001
Refrig-12	0.16990	243.40	1342.54	5.66	0.00000e+000	3.15934e+001
Refrig-13	0.17470	191.75	979.97	7.16	2.07760e+004	2.37983e+001
Refrig-21	0.20690	282.05	1363.18	5.85	1.31959e+003	2.46380e+001
Refrig-22	0.22145	232.40	1227.93	6.09	0.00000e+000	1.72938e+001
R134a	0.23911	247.15	1236.29	6.18	0.00000e+000	7.85080e+000
R-141b	0.20546	305.30	1252.18	6.54	-4.42989e-005	8.52649e+000
R-142b	0.23600	263.14	1124.26	6.93	-8.75995e-005	1.67654e+000
Refrig-40	0.14720	249.10	915.00	8.37	1.22350e+003	2.12351e+001
Refrig-113	0.25600	320.72	1580.06	5.27	0.00000e+000	6.11261e+001
Refrig-500	0.21536	239.65	1137.96	6.64	3.37697e-002	8.65054e+001
Refrig-502	0.22900	227.54	1280.06	5.80	0.00000e+000	2.14824e+001
Phenol	0.42969	455.00	1055.93	8.86	0.00000e+000	-3.58617e+001
o-E-Phenol	0.38449	477.70	1036.96	9.17	0.00000e+000	-4.56332e+000
m-E-Phenol	0.47453	491.60	1024.96	9.37	0.00000e+000	-4.56332e+000
p-E-Phenol	0.52401	491.10	990.64	9.69	0.00000e+000	1.92035e+000
ETBE	0.29173	346.25	762.55	11.20	-8.02372e-005	-1.53906e+000
MTBE	0.26699	328.30	745.84	11.25	0.00000e+000	2.53567e+000
MSBE	0.30819	333.15	746.77	11.29	-2.86191e-005	2.21611e+001
diM-Ether	0.19720	248.30	670.30	11.41	0.00000e+000	1.70308e+001
diE-Ether	0.28099	307.60	712.00	11.53	0.00000e+000	2.14333e+001
EGlycol	1.22800	470.40	1110.71	8.52	0.00000e+000	-2.72545e+001
DEGlycol	-1.38871	518.15	1121.42	8.71	-2.05500e+005	6.30401e+000
TEGlycol	-0.45581	550.40	1128.45	8.83	0.00000e+000	-1.08446e+001
n-C11	0.54220	469.04	742.85	12.72	6.42209e-007	-8.39498e+000
n-C12	0.58069	489.43	751.15	12.76	1.13723e-006	-9.32799e+000
n-C13	0.63400	508.58	758.81	12.80	4.41869e-006	-1.04600e+001
n-C14	0.68207	526.66	762.91	12.88	1.83252e-006	-1.09800e+001
n-C15	0.72539	543.77	770.41	12.89	2.38456e-006	-1.19200e+001
n-C16	0.76670	559.94	775.48	12.93	1.78072e-007	-1.30200e+001
n-C17	0.79460	575.30	780.19	12.97	-1.79850e-006	-1.39699e+001
n-C18	0.81239	589.86	784.09	13.01	3.27690e-006	-1.44699e+001
n-C19	0.83279	603.80	787.59	13.05	1.83190e-006	-1.54899e+001
n-C20	0.92390	616.90	790.70	13.10	1.48056e-006	-2.23800e+001
n-C21	1.05050	629.65	794.30	13.13	-9.65204e+003	8.43114e+001
n-C22	1.05600	641.80	796.80	13.17	-1.12976e+004	9.03190e+001
n-C23	1.04770	653.37	799.91	13.20	-1.29227e+004	9.61817e+001
n-C24	1.03155	664.43	801.36	13.24	-1.47244e+004	1.02777e+002
n-C25	1.00136	675.04	803.41	13.28	-1.64094e+004	1.08834e+002

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
VinylFormate	9.20077e-002	-1.18741e-005	-5.84122e-008	-8.00427e-026	1.00000e+000	0.07508
VinylAcetate	1.54511e-001	-4.07000e-005	-8.25000e-010	-1.26048e-025	1.00000e+000	-0.00383
VinylCl	1.01016e-001	-5.12317e-005	1.19400e-008	1.86147e-025	1.00000e+000	0.00282
FormicAcid	6.79453e-002	-2.80546e-005	5.04558e-009	9.06231e-026	1.00000e+000	-0.00835
AceticAcid	1.27525e-001	-5.84710e-005	1.23804e-008	9.09551e-027	1.00000e+000	-0.01100
BZaicAcid	3.14859e-001	-1.41323e-004	2.65671e-008	-3.69941e-026	1.00000e+000	-2.56522
OleicAcid	1.00078e+000	-5.24242e-004	1.70616e-007	-2.52764e-011	1.00000e+000	0.21945
F2	1.82964e-002	-1.20512e-005	3.01196e-009	-6.81017e-026	1.00000e+000	0.07441
Bromine	5.62494e-003	-3.97327e-006	1.13349e-009	1.44645e-021	1.00000e+000	-0.52385
Iodine	3.25740e-003	-2.32932e-006	7.08488e-010	-1.31565e-022	1.00000e+000	0.05821
Refrig-11	8.14941e-002	-4.72070e-005	1.03646e-008	-2.01123e-025	1.00000e+000	0.24149
Refrig-12	8.91139e-002	-5.02812e-005	1.08537e-008	-1.95346e-025	1.00000e+000	0.18005
Refrig-13	7.33931e-002	-5.91774e-019	-9.28967e-022	4.27225e-025	1.00000e+000	0.07985
Refrig-21	7.99077e-002	-4.51248e-005	1.30324e-008	-1.38170e-012	1.00000e+000	0.14494
Refrig-22	8.09008e-002	-3.89902e-005	7.64599e-009	-6.54835e-026	1.00000e+000	0.20566
R134a	1.76189e-001	-1.12319e-004	3.96085e-008	-5.87245e-012	1.00000e+000	-0.23831
R-141b	1.73660e-001	-1.05365e-004	2.72049e-008	5.44652e-019	1.00000e+000	0.01394
R-142b	1.75696e-001	-1.03738e-004	2.62775e-008	1.07476e-018	1.00000e+000	0.01509
Refrig-40	3.10306e-002	1.16803e-005	-1.43661e-008	3.65012e-012	1.00000e+000	-0.00168
Refrig-113	1.43705e-001	-8.06646e-005	1.72601e-008	-1.56102e-025	1.00000e+000	0.10824
Refrig-500	-1.34868e-001	3.45429e-004	-2.43486e-007	-1.10357e-014	1.00000e+000	0.05275
Refrig-502	1.12456e-001	-5.74809e-005	9.86792e-009	-1.88746e-025	1.00000e+000	0.19009
Phenol	2.99349e-001	-1.61004e-004	3.81998e-008	9.50296e-026	1.00000e+000	-0.15518
o-E-Phenol	3.10562e-001	-1.33035e-004	3.09618e-008	3.45397e-025	1.00000e+000	-0.02253
m-E-Phenol	3.10562e-001	-1.33035e-004	3.09618e-008	3.45397e-025	1.00000e+000	-0.01536
p-E-Phenol	3.07164e-001	-1.21871e-004	2.03249e-008	3.45397e-025	1.00000e+000	-1.02795
ETBE	3.18252e-001	-1.21136e-004	1.93254e-008	9.78963e-019	1.00000e+000	0.00595
MTBE	2.56970e-001	-8.65899e-005	1.07642e-008	-1.24612e-025	1.00000e+000	0.09145
MSBE	2.10782e-001	-4.68004e-005	-1.74999e-009	3.57731e-019	1.00000e+000	0.38647
diM-Ether	8.96084e-002	-1.74581e-005	-4.79795e-010	8.83838e-026	1.00000e+000	-0.07677
diE-Ether	1.68058e-001	-3.45218e-005	-2.34076e-009	-2.76927e-025	1.00000e+000	0.05441
EGlycol	1.77269e-001	-4.33740e-019	3.33725e-022	-7.52084e-026	1.00000e+000	-0.55269
DEGlycol	2.63169e-001	-1.19251e-004	3.11257e-008	-3.69832e-012	1.00000e+000	-0.65403
TEGlycol	4.02138e-001	1.09708e-018	-9.00573e-022	3.03264e-025	1.00000e+000	-0.17213
n-C11	5.27000e-001	-1.93300e-004	3.09243e-008	-3.26329e-021	1.00000e+000	0.09020
n-C12	5.74499e-001	-2.11563e-004	3.39743e-008	-5.80847e-021	1.00000e+000	0.08684
n-C13	6.22497e-001	-2.30398e-004	3.72491e-008	-2.48514e-020	1.00000e+000	0.12642
n-C14	6.68997e-001	-2.47431e-004	3.99492e-008	-8.80418e-021	1.00000e+000	0.12566
n-C15	7.16497e-001	-2.65731e-004	4.29986e-008	-1.33795e-020	1.00000e+000	0.13772
n-C16	7.64499e-001	-2.84565e-004	4.62490e-008	-5.57732e-022	1.00000e+000	0.16651
n-C17	8.11994e-001	-3.02692e-004	4.92987e-008	1.01419e-020	1.00000e+000	0.17686
n-C18	8.58498e-001	-3.19733e-004	5.19488e-008	-1.77282e-020	1.00000e+000	0.23001
n-C19	9.05993e-001	-3.38325e-004	5.51238e-008	-9.00984e-021	1.00000e+000	0.26120
n-C20	9.69494e-001	-3.72303e-004	6.31988e-008	-7.69768e-021	1.00000e+000	0.27595
n-C21	8.48868e-001	-2.09496e-004	1.16521e-021	1.19779e-025	1.00000e+000	0.08021
n-C22	8.89307e-001	-2.19640e-004	2.50490e-021	-6.89950e-025	1.00000e+000	0.09409
n-C23	9.29680e-001	-2.29796e-004	-1.27542e-021	3.60549e-025	1.00000e+000	0.12178
n-C24	9.70028e-001	-2.39897e-004	-5.04208e-021	1.50453e-024	1.00000e+000	0.07006
n-C25	1.01054e+000	-2.50059e-004	1.96912e-021	-8.19043e-025	1.00000e+000	0.03774

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
VinylFormate	-0.16414	Ester	-1350000
VinylAcetate	-0.23420	Ester	-1949000
VinylCl	-0.10514	Halogen	-1157990
FormicAcid	-0.65029	CarbAcid	-211459
AceticAcid	-0.45063	CarbAcid	-786425
BZaicAcid	-4.29125	CarbAcid	-3095070
OleicAcid	-0.71653	CarbAcid	-10500000
F2	-0.04014	Halogen	
Bromine	-0.04182	Halogen	
Iodine	0.07073	Halogen	
Refrig-11	-0.09675	Halogen	
Refrig-12	0.00131	Halogen	
Refrig-13	-0.15939	Halogen	
Refrig-21	-0.07418	Halogen	
Refrig-22	0.10546	Halogen	
R134a	-0.32251	Halogen	-136400
R-141b	-0.18975	Halogen	
R-142b	-0.21893	Halogen	
Refrig-40	-0.13390	Halogen	-675380
Refrig-113	-0.34999	Halogen	
Refrig-500	-0.25681	Halogen	-163880
Refrig-502	-0.09955	Halogen	-163880
Phenol	-0.68528	Phenol	-2921450
o-E-Phenol	-0.33379	Phenol	
m-E-Phenol	-0.42721	Phenol	
p-E-Phenol	-2.59067	Phenol	-4133000
ETBE	-0.26180	Ether	
MTBE	-0.18106	Ether	-3099920
MSBE	0.47250	Ether	
diM-Ether	-0.00330	Ether	-1328420
diE-Ether	-0.12939	Ether	-2503490
EGlycol	-1.44798	Alcohol	-1657500
DEGlycol	-1.84388	Alcohol	-2154990
TEGlycol	-1.24694	Alcohol	-3249800
n-C11	-0.29723	HC	-6963610
n-C12	-0.32563	HC	-7578660
n-C13	-0.30338	HC	-8193660
n-C14	-0.31869	HC	-8808680
n-C15	-0.33985	HC	-9423670
n-C16	-0.33054	HC	-10038700
n-C17	-0.33044	HC	-10653700
n-C18	-0.28975	HC	-11268700
n-C19	-0.28327	HC	-11883600
n-C20	-0.27919	HC	-12498800
n-C21	-0.45331	HC	-12960000
n-C22	-0.42770	HC	-13570000
n-C23	-0.42515	HC	-14170000
n-C24	-0.49296	HC	-14790000
n-C25	-0.53745	HC	-15390000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
n-C26	148	366.690	819.00	9.10000	1.51821	1.81428	1.15400
n-C27	149	380.720	826.00	8.83000	1.57070	1.85397	1.21400
n-C28	150	394.739	832.00	8.50000	1.62224	1.88941	1.23800
n-C29	151	408.769	838.00	8.26000	1.67306	2.01171	1.26500
n-C30	152	422.799	863.00	8.68000	1.72353	2.13333	1.30700
223-Mbutane	153	100.205	531.17	29.53600	0.39800	0.41251	0.25999
2-Mheptane	154	114.232	559.64	24.84400	0.48800	0.48894	0.38400
3-Mheptane	155	114.232	563.67	25.46300	0.46399	0.48368	0.36899
4-Mheptane	156	114.232	561.74	25.42100	0.47600	0.48412	0.36899
3-Ehexane	157	114.232	565.49	26.08100	0.45500	0.45504	0.36399
22-Mhexane	158	114.232	549.87	25.29100	0.47799	0.48287	0.34299
23-Mhexane	159	114.232	563.49	26.28400	0.46799	0.47650	0.34000
24-Mhexane	160	114.232	553.52	25.56400	0.47200	0.48113	0.34099
33-Mhexane	161	114.232	562.02	26.53600	0.44299	0.44293	0.32600
34-Mhexane	162	114.232	568.85	26.92100	0.46599	0.47220	0.32699
2M-3Epentane	163	114.232	567.09	27.00300	0.44299	0.44293	0.34000
3M-3Epentane	164	114.232	576.58	28.07600	0.45500	0.45504	0.29199
223-Mpentane	165	114.232	563.50	27.29600	0.43599	0.46790	0.29699
224-Mpentane	166	114.232	543.96	25.67600	0.46799	0.47894	0.31000
233-Mpentane	167	114.232	573.56	28.19900	0.45500	0.46322	0.28999
234-Mpentane	168	114.232	566.41	27.29600	0.46099	0.46889	0.31999
33-Epentane	169	128.259	610.05	26.74900	0.47299	0.51270	0.33798
2-Moctane	170	128.259	586.75	22.89900	0.54100	0.55238	0.41668
3-Moctane	171	128.259	590.15	23.40600	0.52898	0.54828	0.41844
4-Moctane	172	128.259	587.65	23.40600	0.52300	0.54706	0.41510
3-Eheptane	173	128.259	590.55	24.01400	0.51099	0.54149	0.41615
4-Eheptane	174	128.259	587.95	23.91300	0.50498	0.54092	0.41280
22-Mheptane	175	128.259	577.75	23.20300	0.52600	0.54899	0.38999
23-Mheptane	176	128.259	589.65	24.01400	0.51498	0.53829	0.38519
24-Mheptane	177	128.259	576.85	23.40600	0.51700	0.54514	0.39741
25-Mheptane	178	128.259	581.15	23.50600	0.52199	0.54588	0.40314
26-Mheptane	179	128.259	577.95	23.00100	0.53499	0.55000	0.40171
33-Mheptane	180	128.259	588.55	24.31800	0.50599	0.54193	0.35989
34-Mheptane	181	128.259	591.95	24.62100	0.50300	0.53968	0.37869
35-Mheptane	182	128.259	583.25	24.01400	0.50998	0.54263	0.40314
44-Mheptane	183	128.259	585.45	24.31800	0.50098	0.54056	0.36359
2M-3Ehexane	184	128.259	588.25	24.52100	0.49698	0.53582	0.37670
2M-4Ehexane	185	128.259	580.15	24.01400	0.50400	0.54000	0.39908
3M-3Ehexane	186	128.259	597.55	25.53400	0.48699	0.53121	0.35089
3M-4Ehexane	187	128.259	593.85	25.12900	0.49000	0.53179	0.37029
223-Mhexane	188	128.259	588.05	24.92600	0.49799	0.52828	0.33199
224-Mhexane	189	128.259	573.65	23.81100	0.50700	0.53609	0.32100
225-Mhexane	190	128.259	568.05	23.30400	0.51898	0.54079	0.35600
233-Mhexane	191	128.259	596.15	25.53400	0.49099	0.53372	0.32989
234-Mhexane	192	128.259	594.55	25.22900	0.49399	0.53223	0.35179
235-Mhexane	193	128.259	579.25	24.01400	0.50900	0.54021	0.36348
244-Mhexane	194	128.259	581.65	24.31800	0.50000	0.53961	0.34270
334-Mhexane	195	128.259	602.35	26.24300	0.48399	0.52783	0.32649
22M3Epentane	196	128.259	590.55	25.53400	0.48600	0.53333	0.33008

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
n-C26	0.94980	685.37	805.37	13.32	-1.81984e+004	1.15324e+002
n-C27	0.90008	695.26	807.13	13.35	-1.99691e+004	1.21678e+002
n-C28	0.84548	704.76	808.40	13.39	-2.17237e+004	1.27974e+002
n-C29	0.92403	713.93	810.34	13.42	-2.35708e+004	1.34607e+002
n-C30	0.99190	722.87	811.90	13.45	-2.54216e+004	1.41341e+002
223-Mbutane	0.25110	354.03	693.25	12.41	8.61932e+003	1.55115e+001
2-Mheptane	0.37799	390.80	700.82	12.69	1.43335e+004	-6.89573e+000
3-Mheptane	0.36689	392.08	708.56	12.57	6.71204e+003	2.12243e+001
4-Mheptane	0.37079	390.86	707.49	12.57	6.74539e+003	2.13726e+001
3-Ehexane	0.36050	391.69	716.47	12.42	7.57107e+003	1.75915e+001
22-Mhexane	0.33739	379.99	698.39	12.62	7.14704e+003	2.25608e+001
23-Mhexane	0.34580	388.76	715.01	12.42	7.75293e+003	1.74649e+001
24-Mhexane	0.34250	382.58	703.26	12.56	7.28183e+003	2.10758e+001
33-Mhexane	0.32060	385.12	712.85	12.42	7.94517e+003	1.74649e+001
34-Mhexane	0.33759	390.88	721.96	12.32	8.29220e+003	1.48502e+001
2M-3Epentane	0.32980	388.80	722.33	12.29	8.58511e+003	1.41417e+001
3M-3Epentane	0.30370	391.42	730.17	12.19	9.24114e+003	1.12611e+001
223-Mpentane	0.29649	382.99	718.65	12.29	8.85479e+003	1.42217e+001
224-Mpentane	0.30450	372.39	694.96	12.59	1.40437e+004	-4.16259e+001
233-Mpentane	0.28889	387.91	729.04	12.17	9.52832e+003	1.08077e+001
234-Mpentane	0.31439	386.62	721.96	12.28	8.80535e+003	1.25654e+001
33-Epentane	0.33649	419.33	755.97	12.04	1.05172e+004	7.83791e+000
2-Moctane	0.42250	416.43	716.10	12.69	5.46165e+003	2.68700e+001
3-Moctane	0.41844	417.38	723.07	12.57	6.13694e+003	2.37792e+001
4-Moctane	0.41510	415.59	723.07	12.55	6.34663e+003	2.32790e+001
3-Eheptane	0.40830	416.15	729.42	12.45	7.07041e+003	2.03162e+001
4-Eheptane	0.41280	414.35	730.93	12.41	7.48815e+003	1.90465e+001
22-Mheptane	0.39704	405.85	713.21	12.63	6.37101e+003	2.54338e+001
23-Mheptane	0.38479	413.65	728.66	12.44	7.27485e+003	1.99943e+001
24-Mheptane	0.39741	406.05	717.92	12.55	6.87635e+003	2.31508e+001
25-Mheptane	0.40314	409.15	719.75	12.55	6.71795e+003	2.31379e+001
26-Mheptane	0.40059	408.37	711.77	12.68	5.92557e+003	2.68188e+001
33-Mheptane	0.40503	410.17	728.29	12.41	7.65783e+003	1.91747e+001
34-Mheptane	0.41168	413.75	733.97	12.35	7.97257e+003	1.73791e+001
35-Mheptane	0.40314	409.15	724.92	12.46	7.35052e+003	2.05856e+001
44-Mheptane	0.40167	408.35	728.29	12.39	7.88511e+003	1.86613e+001
2M-3Ehexane	0.40382	411.15	736.26	12.29	8.62196e+003	1.54550e+001
2M-4Ehexane	0.39908	406.95	726.42	12.41	7.81521e+003	1.91747e+001
3M-3Ehexane	0.39245	413.75	744.02	12.18	9.41460e+003	1.22927e+001
3M-4Ehexane	0.39583	413.55	742.46	12.21	9.20836e+003	1.30180e+001
223-Mhexane	0.33489	406.76	732.06	12.31	8.59821e+003	1.63003e+001
224-Mhexane	0.34810	399.70	718.29	12.48	7.70144e+003	2.11754e+001
225-Mhexane	0.35690	397.24	716.83	12.48	7.83445e+003	2.12012e+001
233-Mhexane	0.39318	410.84	740.12	12.22	9.21772e+003	1.34154e+001
234-Mhexane	0.39362	412.21	741.68	12.21	9.26761e+003	1.30307e+001
235-Mhexane	0.39454	404.50	724.92	12.41	7.92974e+003	1.92504e+001
244-Mhexane	0.39326	403.81	726.42	12.38	8.21217e+003	1.83023e+001
334-Mhexane	0.38113	413.63	748.36	12.11	1.00877e+004	1.00405e+001
22M3Epentane	0.38765	406.99	737.42	12.23	9.32738e+003	1.36464e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
n-C26	1.05093e+000	-2.60183e-004	7.20382e-021	-1.62915e-024	1.00000e+000	-0.00264
n-C27	1.09133e+000	-2.70325e-004	-3.46417e-021	9.61072e-025	1.00000e+000	-0.05088
n-C28	1.13132e+000	-2.80476e-004	3.18357e-021	-2.07264e-024	1.00000e+000	-0.32642
n-C29	1.17215e+000	-2.90600e-004	2.78954e-021	-9.90603e-025	1.00000e+000	-0.20216
n-C30	1.21259e+000	-3.00731e-004	-8.74328e-022	-4.26918e-025	1.00000e+000	-0.30101
223-Mbutane	2.83229e-001	-6.75698e-005	4.14438e-023	1.11299e-025	1.00000e+000	-0.02080
2-Mheptane	3.89360e-001	-1.41077e-004	1.97503e-008	9.21368e-013	1.00000e+000	0.03993
3-Mheptane	3.23562e-001	-7.76545e-005	4.25207e-022	-9.22759e-026	1.00000e+000	0.02356
4-Mheptane	3.23538e-001	-7.76111e-005	4.01585e-022	-2.30690e-025	1.00000e+000	0.03396
3-Ehexane	3.23939e-001	-7.79675e-005	3.14181e-021	-5.76724e-025	1.00000e+000	-0.01563
22-Mhexane	3.23116e-001	-7.72421e-005	9.68528e-022	8.07414e-026	1.00000e+000	0.02741
23-Mhexane	3.23848e-001	-7.79103e-005	1.22838e-021	-6.22862e-025	1.00000e+000	0.02273
24-Mhexane	3.23334e-001	-7.74408e-005	8.97660e-022	6.92069e-026	1.00000e+000	-0.00341
33-Mhexane	3.23767e-001	-7.78247e-005	1.18113e-022	-6.92069e-026	1.00000e+000	0.01575
34-Mhexane	3.24168e-001	-7.81799e-005	2.36226e-023	3.11431e-025	1.00000e+000	0.03015
2M-3Epentane	3.24179e-001	-7.81959e-005	-2.74022e-021	8.42017e-025	1.00000e+000	0.01707
3M-3Epentane	3.24522e-001	-7.84929e-005	1.41736e-021	-2.53759e-025	1.00000e+000	-0.01842
223-Mpentane	3.24019e-001	-7.80531e-005	2.22053e-021	-1.17652e-024	1.00000e+000	0.06936
224-Mpentane	4.87337e-001	-2.60618e-004	9.82242e-008	-1.78437e-011	1.00000e+000	0.07948
233-Mpentane	3.24476e-001	-7.84507e-005	1.29924e-021	-2.07621e-025	1.00000e+000	0.01343
234-Mpentane	3.24168e-001	-7.81799e-005	-4.25207e-021	9.22759e-025	1.00000e+000	0.05064
33-Epentane	3.65538e-001	-8.91857e-005	1.69749e-021	1.03607e-025	1.00000e+000	-0.00960
2-Moctane	3.63677e-001	-8.75260e-005	5.56990e-022	0.00000e+000	1.00000e+000	0.03374
3-Moctane	3.64038e-001	-8.78300e-005	0.00000e+000	1.29509e-025	1.00000e+000	0.01319
4-Moctane	3.64038e-001	-8.78300e-005	2.65233e-021	-8.93609e-025	1.00000e+000	0.03868
3-Eheptane	3.64320e-001	-8.81005e-005	2.28101e-021	-7.64100e-025	1.00000e+000	-0.00588
4-Eheptane	3.64384e-001	-8.81647e-005	-5.83514e-022	-2.07214e-025	1.00000e+000	-0.00700
22-Mheptane	3.63550e-001	-8.73977e-005	-2.91757e-022	3.49673e-025	1.00000e+000	0.00589
23-Mheptane	3.64307e-001	-8.80685e-005	-2.33405e-021	4.01476e-025	1.00000e+000	0.32706
24-Mheptane	3.63781e-001	-8.76055e-005	-3.18280e-021	7.38198e-025	1.00000e+000	0.06306
25-Mheptane	3.63743e-001	-8.76863e-005	-8.2224e-022	9.06560e-026	1.00000e+000	0.03511
26-Mheptane	3.63358e-001	-8.73349e-005	-2.04230e-021	5.95739e-025	1.00000e+000	0.03773
33-Mheptane	3.64256e-001	-8.80531e-005	-1.22007e-021	-3.88526e-026	1.00000e+000	0.01432
34-Mheptane	3.64551e-001	-8.82917e-005	-1.40574e-021	9.45412e-025	1.00000e+000	0.02280
35-Mheptane	3.63998e-001	-8.79095e-005	7.16130e-022	-2.97870e-025	1.00000e+000	0.04450
44-Mheptane	3.64256e-001	-8.80531e-005	-1.11398e-021	1.94263e-025	1.00000e+000	0.02258
2M-3Ehexane	3.64640e-001	-8.83879e-005	-2.65233e-022	2.33115e-025	1.00000e+000	0.09941
2M-4Ehexane	3.64191e-001	-8.79735e-005	5.83514e-022	-3.62624e-025	1.00000e+000	0.03020
3M-3Ehexane	3.65012e-001	-8.87073e-005	1.27312e-021	-1.81312e-025	1.00000e+000	0.00258
3M-4Ehexane	3.64948e-001	-8.86431e-005	1.56488e-021	-5.82788e-025	1.00000e+000	0.01856
223-Mhexane	3.64448e-001	-8.82122e-005	-5.35772e-021	8.80658e-025	1.00000e+000	0.06282
224-Mhexane	3.63807e-001	-8.76222e-005	3.05018e-021	-3.88526e-026	1.00000e+000	0.10079
225-Mhexane	3.63730e-001	-8.75568e-005	-1.06093e-021	3.88526e-026	1.00000e+000	0.03186
233-Mhexane	3.64832e-001	-8.85482e-005	3.12975e-021	-1.42459e-025	1.00000e+000	0.03782
234-Mhexane	3.64897e-001	-8.86111e-005	-2.59929e-021	4.92132e-025	1.00000e+000	0.05816
235-Mhexane	3.63998e-001	-8.79095e-005	-1.06093e-022	-3.62624e-025	1.00000e+000	0.05764
244-Mhexane	3.64191e-001	-8.79735e-005	-1.03441e-021	-5.30985e-025	1.00000e+000	0.03378
334-Mhexane	3.65218e-001	-8.88830e-005	-1.77706e-021	2.84919e-025	1.00000e+000	0.05642
22M3Epentane	3.64705e-001	-8.84354e-005	-1.69749e-021	6.99346e-025	1.00000e+000	0.07403

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
n-C26	-0.58512	HC	-16000000
n-C27	-0.65288	HC	-16600000
n-C28	-0.94370	HC	-17220000
n-C29	-0.81097	HC	-17820000
n-C30	-0.91807	HC	-18430000
223-Mbutane	-0.47383	HC	-4486440
2-Mheptane	-0.24932	HC	-5111440
3-Mheptane	-0.25633	HC	-5114280
4-Mheptane	-0.22450	HC	-5114830
3-Ehexane	-0.24625	HC	-5116080
22-Mhexane	-0.30781	HC	-5102210
23-Mhexane	-0.25134	HC	-5112980
24-Mhexane	-0.28444	HC	-5107540
33-Mhexane	-0.25231	HC	-5106790
34-Mhexane	-0.21750	HC	-5113950
2M-3Epentane	-0.22450	HC	-5115750
3M-3Epentane	-0.30860	HC	-5111930
223-Mpentane	-0.27044	HC	-5106830
224-Mpentane	-0.24127	HC	-5102750
233-Mpentane	-0.34143	HC	-5110500
234-Mpentane	-0.23962	HC	-5109460
33-Epentane	-0.35152	HC	-5684300
2-Moctane	-0.29188	HC	-5679100
3-Moctane	-0.30145	HC	-5681100
4-Moctane	-0.26333	HC	-5680100
3-Eheptane	-0.29872	HC	
4-Eheptane	-0.27575	HC	
22-Mheptane	-0.35984	HC	
23-Mheptane	0.09704	HC	
24-Mheptane	-0.23115	HC	
25-Mheptane	-0.28141	HC	
26-Mheptane	-0.29405	HC	
33-Mheptane	-0.31812	HC	
34-Mheptane	-0.26436	HC	
35-Mheptane	-0.25251	HC	
44-Mheptane	-0.26245	HC	
2M-3Ehexane	-0.15679	HC	
2M-4Ehexane	-0.25575	HC	
3M-3Ehexane	-0.28402	HC	
3M-4Ehexane	-0.24635	HC	
223-Mhexane	-0.28946	HC	
224-Mhexane	-0.24513	HC	
225-Mhexane	-0.36585	HC	
233-Mhexane	-0.29067	HC	
234-Mhexane	-0.24853	HC	
235-Mhexane	-0.26717	HC	
244-Mhexane	-0.29234	HC	
334-Mhexane	-0.26528	HC	
22M3Epentane	-0.26960	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
23M3Epentane	197	128.259	606.85	26.85100	0.47699	0.52253	0.34670
24M3Epentane	198	128.259	591.25	25.22900	0.48899	0.53152	0.35080
2233Mpentane	199	128.259	610.85	27.35800	0.47799	0.50862	0.27930
2234Mpentane	200	128.259	592.15	26.04100	0.49000	0.51980	0.31299
2244Mpentane	201	128.259	571.35	24.79400	0.50400	0.53766	0.31200
2334Mpentane	202	128.259	609.05	26.95100	0.48100	0.51270	0.31299
33-Ehexane	203	142.285	627.93	24.13100	0.50976	0.58885	0.37569
34-Ehexane	204	142.285	618.93	23.30400	0.51866	0.59683	0.40400
2-Mnonane	205	142.285	610.37	20.95900	0.59592	0.61667	0.46140
3-Mnonane	206	142.285	613.54	21.37400	0.58170	0.61211	0.46283
4-Mnonane	207	142.285	610.54	21.37400	0.57462	0.61040	0.45892
5-Mnonane	208	142.285	609.76	21.37400	0.57283	0.61078	0.45778
3-Eoctane	209	142.285	613.76	21.85600	0.56129	0.60605	0.46042
4-Eoctane	210	142.285	609.76	21.78600	0.55150	0.60556	0.45504
22-Moctane	211	142.285	602.04	21.30400	0.57994	0.61246	0.42070
23-Moctane	212	142.285	613.26	21.85600	0.56660	0.60711	0.42550
24-Moctane	213	142.285	599.43	21.37400	0.56572	0.60978	0.44034
25-Moctane	214	142.285	603.15	21.51100	0.56928	0.60860	0.44527
26-Moctane	215	142.285	603.15	21.51100	0.57550	0.61106	0.44887
27-Moctane	216	142.285	603.04	20.95900	0.58969	0.61347	0.44789
33-Moctane	217	142.285	612.26	22.20100	0.55685	0.60491	0.42649
34-Moctane	218	142.285	614.04	22.40800	0.55062	0.60132	0.41960
35-Moctane	219	142.285	606.37	21.85600	0.55506	0.60448	0.42598
36-Moctane	220	142.285	608.37	21.85600	0.56217	0.60583	0.42550
44-Moctane	221	142.285	606.93	22.06300	0.54795	0.60596	0.42440
45-Moctane	222	142.285	612.26	22.40800	0.54619	0.59863	0.42160
4n-Pheptane	223	142.285	601.15	21.78600	0.54531	0.60294	0.44339
4-i-Pheptane	224	142.285	607.76	22.25000	0.53731	0.60284	0.41859
2M-3Eheptane	225	142.285	610.93	22.25000	0.54351	0.60070	0.41909
2M-4Eheptane	226	142.285	601.87	21.85600	0.54531	0.60276	0.44097
2M-5Eheptane	227	142.285	606.87	21.85600	0.55506	0.60566	0.44758
3M-3Eheptane	228	142.285	620.04	23.09600	0.53197	0.59801	0.40999
3M-4Eheptane	229	142.285	614.43	22.82100	0.53021	0.59522	0.41310
3M-5Eheptane	230	142.285	606.76	22.25000	0.54087	0.60105	0.41879
4M-3Eheptane	231	142.285	615.54	22.82100	0.53285	0.59591	0.41290
4M-4Eheptane	232	142.285	615.87	23.09600	0.52486	0.59455	0.40928
223-Mheptane	233	142.285	611.87	22.68400	0.54619	0.60113	0.39719
224-Mheptane	234	142.285	594.54	21.64900	0.55150	0.60496	0.41040
225-Mheptane	235	142.285	598.04	21.64900	0.55861	0.60619	0.43075
226-Mheptane	236	142.285	593.43	21.30400	0.57283	0.60794	0.42732
233-Mheptane	237	142.285	617.65	23.23500	0.53820	0.59701	0.39140
234-Mheptane	238	142.285	613.87	22.89100	0.53820	0.59622	0.44115
235-Mheptane	239	142.285	612.87	22.40800	0.54707	0.60017	0.44947
236-Mheptane	240	142.285	604.26	21.85600	0.55952	0.60434	0.44056
244-Mheptane	241	142.285	600.37	22.20100	0.54087	0.60197	0.43116
245-Mheptane	242	142.285	606.93	22.40800	0.54351	0.59965	0.44150
246-Mheptane	243	142.285	590.37	21.51100	0.55952	0.60715	0.42482
255-Mheptane	244	142.285	602.93	22.20100	0.54974	0.59890	0.43459
334-Mheptane	245	142.285	622.15	23.71800	0.52577	0.59052	0.43055

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
23M3Epentane	0.38102	417.85	757.59	12.00	1.09740e+004	6.56058e+000
24M3Epentane	0.38916	409.85	740.51	12.20	9.40431e+003	1.29154e+001
2233Mpentane	0.27930	413.44	759.22	11.94	1.18366e+004	4.38197e+000
2234Mpentane	0.31220	406.18	741.68	12.15	1.00649e+004	1.12333e+001
2244Mpentane	0.37790	395.44	721.96	12.37	8.70799e+003	1.80832e+001
2334Mpentane	0.31169	414.72	757.18	11.98	1.13323e+004	5.82423e+000
33-Ehexane	0.43209	439.43	763.74	12.11	1.01482e+004	1.07607e+001
34-Ehexane	0.44758	437.04	753.55	12.25	8.75992e+003	1.56798e+001
2-Mnonane	0.46140	440.18	729.04	12.69	4.76299e+003	2.98081e+001
3-Mnonane	0.46283	440.93	735.88	12.58	5.57885e+003	2.63939e+001
4-Mnonane	0.45719	438.87	734.73	12.58	5.67219e+003	2.64366e+001
5-Mnonane	0.45778	438.26	735.11	12.57	5.79996e+003	2.60379e+001
3-Eoctane	0.46042	439.65	742.85	12.45	6.73947e+003	2.23100e+001
4-Eoctane	0.45504	436.82	740.90	12.46	6.81032e+003	2.25237e+001
22-Moctane	0.44222	430.04	727.16	12.63	5.74489e+003	2.79018e+001
23-Moctane	0.45631	437.49	740.51	12.47	6.66790e+003	2.29220e+001
24-Moctane	0.44034	429.04	729.04	12.59	6.11754e+003	2.66212e+001
25-Moctane	0.44527	431.65	732.82	12.55	6.30647e+003	2.53551e+001
26-Moctane	0.44887	433.56	730.55	12.60	5.75783e+003	2.71053e+001
27-Moctane	0.44319	433.04	727.16	12.66	5.37793e+003	2.87843e+001
33-Moctane	0.45041	434.37	741.68	12.42	7.24202e+003	2.13426e+001
34-Moctane	0.45451	436.54	747.57	12.34	7.86566e+003	1.87816e+001
35-Moctane	0.44694	432.54	739.35	12.44	7.13131e+003	2.20969e+001
36-Moctane	0.44958	433.93	738.96	12.46	6.89483e+003	2.26945e+001
44-Moctane	0.44339	430.65	737.03	12.46	7.03313e+003	2.27797e+001
45-Moctane	0.45091	435.30	749.55	12.30	8.34516e+003	1.73443e+001
4n-Pheptane	0.44339	430.65	738.57	12.44	7.26193e+003	2.19546e+001
4-i-Pheptane	0.44600	432.04	741.68	12.40	7.54537e+003	2.06740e+001
2M-3Eheptane	0.45041	434.37	746.38	12.34	7.96595e+003	1.87816e+001
2M-4Eheptane	0.44097	429.37	738.57	12.43	7.42913e+003	2.15562e+001
2M-5Eheptane	0.44758	432.87	738.19	12.47	6.91719e+003	2.28211e+001
3M-3Eheptane	0.44896	436.93	752.74	12.26	8.64353e+003	1.60765e+001
3M-4Eheptane	0.44369	435.37	753.15	12.24	8.91956e+003	1.53666e+001
3M-5Eheptane	0.44475	431.37	743.24	12.37	7.87448e+003	1.96208e+001
4M-3Eheptane	0.44589	436.15	753.15	12.25	8.81427e+003	1.56226e+001
4M-4Eheptane	0.43887	433.93	753.55	12.22	9.18251e+003	1.47123e+001
223-Mheptane	0.44358	430.76	744.81	12.34	8.20003e+003	1.85682e+001
224-Mheptane	0.42607	421.43	730.17	12.49	7.24985e+003	2.37471e+001
225-Mheptane	0.43075	423.93	730.93	12.50	7.02986e+003	2.40889e+001
226-Mheptane	0.42732	422.10	726.42	12.56	6.64484e+003	2.59670e+001
233-Mheptane	0.44130	433.37	751.54	12.25	8.92853e+003	1.56511e+001
234-Mheptane	0.44115	433.04	751.15	12.25	8.90846e+003	1.57794e+001
235-Mheptane	0.44947	433.87	747.57	12.32	8.21981e+003	1.79988e+001
236-Mheptane	0.44056	429.15	737.42	12.44	7.28626e+003	2.21381e+001
244-Mheptane	0.43116	424.15	737.03	12.40	7.88983e+003	2.08305e+001
245-Mheptane	0.44150	429.65	744.41	12.33	8.28753e+003	1.84529e+001
246-Mheptane	0.42482	420.76	725.67	12.56	6.71671e+003	2.59670e+001
255-Mheptane	0.43459	425.97	742.46	12.33	8.47748e+003	1.83970e+001
334-Mheptane	0.43055	435.04	759.22	12.14	9.98272e+003	1.19102e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
23M3Epentane	3.65602e-001	-8.92497e-005	1.59140e-021	-6.73444e-025	1.00000e+000	0.04611
24M3Epentane	3.64832e-001	-8.85636e-005	-2.91757e-022	-1.81312e-025	1.00000e+000	0.05254
2233Mpentane	3.65665e-001	-8.93139e-005	1.04767e-021	-9.06560e-026	1.00000e+000	0.05025
2234Mpentane	3.64897e-001	-8.86111e-005	2.09534e-021	-1.94263e-025	1.00000e+000	0.09303
2244Mpentane	3.63986e-001	-8.77812e-005	5.83514e-022	9.06560e-026	1.00000e+000	0.10362
2334Mpentane	3.65602e-001	-8.92344e-005	8.22224e-022	7.77051e-026	1.00000e+000	0.08058
33-Ehexane	4.05911e-001	-9.92760e-005	2.44218e-021	-1.02007e-024	1.00000e+000	0.12962
34-Ehexane	4.05413e-001	-9.88334e-005	-1.32407e-021	-1.43671e-026	1.00000e+000	0.15410
2-Mnonane	4.04161e-001	-9.77165e-005	-8.53292e-022	-5.45950e-025	1.00000e+000	-0.02053
3-Mnonane	4.04516e-001	-9.80366e-005	1.97140e-021	-3.73545e-025	1.00000e+000	-0.01767
4-Mnonane	4.04458e-001	-9.79826e-005	1.76543e-022	-2.44241e-025	1.00000e+000	-0.13594
5-Mnonane	4.04472e-001	-9.80011e-005	7.65020e-022	-1.29304e-025	1.00000e+000	-0.04033
3-Eoctane	4.04872e-001	-9.83539e-005	3.03066e-021	-6.60887e-025	1.00000e+000	-0.01187
4-Eoctane	4.04772e-001	-9.82672e-005	-4.03107e-021	9.76964e-025	1.00000e+000	-0.00195
22-Moctane	4.04061e-001	-9.76297e-005	1.08868e-021	-4.88482e-025	1.00000e+000	0.16254
23-Moctane	4.04728e-001	-9.82487e-005	-2.05967e-021	5.31583e-025	1.00000e+000	0.11856
24-Moctane	4.04161e-001	-9.77165e-005	-9.41563e-022	-3.16077e-025	1.00000e+000	0.16977
25-Moctane	4.04360e-001	-9.78944e-005	-1.35350e-021	6.75254e-025	1.00000e+000	0.16140
26-Moctane	4.04232e-001	-9.77891e-005	5.91419e-021	-1.12064e-024	1.00000e+000	0.17497
27-Moctane	4.04061e-001	-9.76297e-005	-1.11811e-021	4.74115e-025	1.00000e+000	0.15104
33-Moctane	4.04801e-001	-9.83013e-005	-1.67716e-021	3.59178e-025	1.00000e+000	0.15207
34-Moctane	4.05085e-001	-9.85674e-005	3.58971e-021	-6.46520e-025	1.00000e+000	0.15047
35-Moctane	4.04701e-001	-9.81960e-005	-1.02984e-021	7.18356e-026	1.00000e+000	0.16166
36-Moctane	4.04659e-001	-9.81775e-005	1.53004e-021	-9.91331e-025	1.00000e+000	0.15578
44-Moctane	4.04573e-001	-9.80880e-005	-2.05967e-022	-2.44241e-025	1.00000e+000	0.16400
45-Moctane	4.05214e-001	-9.86556e-005	-1.00041e-021	3.30444e-025	1.00000e+000	0.15497
4n-Pheptane	4.04659e-001	-9.81604e-005	-1.29465e-021	3.30444e-025	1.00000e+000	0.17091
4-i-Pheptane	4.04801e-001	-9.83013e-005	-2.26564e-021	2.87342e-025	1.00000e+000	0.16466
2M-3Eheptane	4.05057e-001	-9.85147e-005	-2.38333e-021	2.44241e-025	1.00000e+000	0.15845
2M-4Eheptane	4.04659e-001	-9.81604e-005	-1.97140e-021	3.73545e-025	1.00000e+000	0.17098
2M-5Eheptane	4.04630e-001	-9.81419e-005	-2.17737e-021	5.31583e-025	1.00000e+000	0.16098
3M-3Eheptane	4.05228e-001	-9.87979e-005	1.61831e-021	-6.32153e-025	1.00000e+000	0.14954
3M-4Eheptane	4.05228e-001	-9.88148e-005	-4.11934e-022	-1.00570e-025	1.00000e+000	0.15726
3M-5Eheptane	4.04872e-001	-9.83724e-005	1.35350e-021	-3.87912e-025	1.00000e+000	0.16437
4M-3Eheptane	4.05228e-001	-9.88148e-005	-1.44177e-021	1.58038e-025	1.00000e+000	0.15487
4M-4Eheptane	4.05413e-001	-9.88334e-005	2.32448e-021	-5.02849e-025	1.00000e+000	0.15748
223-Mheptane	4.04943e-001	-9.84436e-005	2.70699e-021	-3.16077e-025	1.00000e+000	0.15523
224-Mheptane	4.04218e-001	-9.77706e-005	-4.70782e-022	1.43671e-025	1.00000e+000	0.18375
225-Mheptane	4.04232e-001	-9.78061e-005	-7.65020e-022	7.18356e-026	1.00000e+000	0.17553
226-Mheptane	4.04018e-001	-9.75940e-005	1.23580e-021	-1.00570e-025	1.00000e+000	0.17856
233-Mheptane	4.05299e-001	-9.87438e-005	-5.00205e-022	-5.17216e-025	1.00000e+000	0.14891
234-Mheptane	4.05299e-001	-9.87267e-005	-1.61831e-021	7.47090e-025	1.00000e+000	0.15433
235-Mheptane	4.05085e-001	-9.85674e-005	1.11811e-021	1.72405e-025	1.00000e+000	0.15636
236-Mheptane	4.04587e-001	-9.81064e-005	-3.23662e-021	4.31013e-025	1.00000e+000	0.16379
244-Mheptane	4.04573e-001	-9.80880e-005	-7.35596e-022	3.73545e-025	1.00000e+000	0.17542
245-Mheptane	4.04943e-001	-9.84265e-005	-1.26523e-021	-1.43671e-026	1.00000e+000	0.16279
246-Mheptane	4.03990e-001	-9.75586e-005	-6.50267e-021	1.36488e-024	1.00000e+000	0.18580
255-Mheptane	4.04858e-001	-9.83369e-005	-7.65020e-022	2.29874e-025	1.00000e+000	0.17926
334-Mheptane	4.05653e-001	-9.90810e-005	5.29629e-022	3.44811e-025	1.00000e+000	0.14832

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
23M3Epentane	-0.29469	HC	
24M3Epentane	-0.26640	HC	
2233Mpentane	-0.42438	HC	-5681500
2234Mpentane	-0.30930	HC	-5682000
2244Mpentane	-0.35337	HC	-5679800
2334Mpentane	-0.30561	HC	
33-Ehexane	-0.19504	HC	
34-Ehexane	-0.19143	HC	
2-Mnonane	-0.40073	HC	
3-Mnonane	-0.37994	HC	
4-Mnonane	-0.51174	HC	
5-Mnonane	-0.40531	HC	
3-Eoctane	-0.37117	HC	
4-Eoctane	-0.36169	HC	
22-Moctane	-0.18231	HC	
23-Moctane	-0.23148	HC	
24-Moctane	-0.18004	HC	
25-Moctane	-0.19038	HC	
26-Moctane	-0.17362	HC	
27-Moctane	-0.20656	HC	
33-Moctane	-0.19221	HC	
34-Moctane	-0.19965	HC	
35-Moctane	-0.18960	HC	
36-Moctane	-0.19505	HC	
44-Moctane	-0.17892	HC	
45-Moctane	-0.19539	HC	
4n-Pheptane	-0.18648	HC	-163880
4-i-Pheptane	-0.18430	HC	
2M-3Eheptane	-0.19221	HC	
2M-4Eheptane	-0.17960	HC	
2M-5Eheptane	-0.19032	HC	
3M-3Eheptane	-0.19109	HC	
3M-4Eheptane	-0.19099	HC	-163880
3M-5Eheptane	-0.18343	HC	-163880
4M-3Eheptane	-0.19336	HC	
4M-4Eheptane	-0.18242	HC	
223-Mheptane	-0.17665	HC	
224-Mheptane	-0.14846	HC	
225-Mheptane	-0.15792	HC	
226-Mheptane	-0.15421	HC	
233-Mheptane	-0.18102	HC	
234-Mheptane	-0.18384	HC	
235-Mheptane	-0.18645	HC	
236-Mheptane	-0.17734	HC	
244-Mheptane	-0.15692	HC	
245-Mheptane	-0.17711	HC	
246-Mheptane	-0.14936	HC	
255-Mheptane	-0.15015	HC	
334-Mheptane	-0.17994	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
335-Mheptane	246	142.285	609.15	23.20300	0.53731	0.58950	0.38198
344-Mheptane	247	142.285	621.04	23.71800	0.52398	0.58902	0.42704
345-Mheptane	248	142.285	619.65	23.37300	0.52932	0.59096	0.43373
2M3i-Phexane	249	142.285	623.43	22.89100	0.52932	0.60315	0.39289
22M-3Ehexane	250	142.285	611.76	23.09600	0.52577	0.59398	0.36959
22M-4Ehexane	251	142.285	594.76	22.20100	0.53908	0.59938	0.38820
23M-3Ehexane	252	142.285	626.93	24.20100	0.51599	0.58537	0.35679
23M-4Ehexane	253	142.285	617.37	23.37300	0.52398	0.59012	0.38449
24M-3Ehexane	254	142.285	616.26	23.37300	0.52222	0.58995	0.38409
24M-4Ehexane	255	142.285	621.04	23.71800	0.52398	0.59034	0.36438
25M-3Ehexane	256	142.285	603.54	22.40800	0.53731	0.59885	0.39939
33M-4Ehexane	257	142.285	625.76	24.20100	0.51332	0.58485	0.35679
34M-3Ehexane	258	142.285	624.65	24.20100	0.51067	0.58472	0.35679
2233-Mhexane	259	142.285	628.26	25.12900	0.51775	0.57370	0.38198
2234-Mhexane	260	142.285	620.43	23.71800	0.52486	0.59056	0.34400
2235-Mhexane	261	142.285	601.37	22.68400	0.53996	0.59833	0.35690
2244-Mhexane	262	142.285	610.37	22.47600	0.53465	0.59513	0.34259
2245-Mhexane	263	142.285	598.54	22.20100	0.54351	0.59952	0.36430
2255-Mhexane	264	142.285	582.93	21.88600	0.55685	0.59920	0.37500
2334-Mhexane	265	142.285	633.15	24.82100	0.51419	0.58217	0.33180
2335-Mhexane	266	142.285	610.15	23.23500	0.53109	0.59227	0.35130
2344-Mhexane	267	142.285	626.65	24.20100	0.51775	0.58585	0.33660
2345-Mhexane	268	142.285	613.37	23.37300	0.53021	0.59363	0.36309
3344-Mhexane	269	142.285	646.87	25.71600	0.50621	0.57637	0.32390
24M3iPpentan	270	142.285	614.54	23.37300	0.52130	0.58498	0.36359
2M33Epentane	271	142.285	639.93	25.30400	0.50089	0.57677	0.34439
223M3Epentan	272	142.285	646.15	25.71600	0.50268	0.57608	0.30559
224M3Epentan	273	142.285	615.43	23.71800	0.51775	0.58547	0.34409
234M3Epentan	274	142.285	642.43	25.44100	0.50621	0.57915	0.32629
22334Mpentan	275	142.285	643.93	25.85500	0.50801	0.57656	0.28979
22344Mpentan	276	142.285	627.37	23.99400	0.52130	0.58186	0.30439
Cyclopropane	277	42.081	397.81	54.95100	0.17069	0.16098	0.12996
Cyclobutane	278	56.108	459.93	49.84900	0.21013	0.21209	0.18095
Spiro-C5	279	68.120	499.70	52.10000	0.23650	0.25300	0.22100
1Mcyccpentene	280	82.150	542.00	37.70000	0.31120	0.29901	0.21900
3Mcyccpentene	281	82.150	535.70	40.20000	0.29850	0.23938	0.22100
Cycloheptane	282	98.189	604.20	38.10000	0.35299	0.36131	0.23700
Cyclooctane	283	112.208	647.20	35.60000	0.40999	0.41196	0.23600
Cyclononane	284	126.236	644.26	31.71600	0.51217	0.48043	0.50145
Cyclodecane	285	140.268	667.04	29.64600	0.56910	0.50998	0.55826
Ecycclopentan	286	98.189	569.52	33.97600	0.37446	0.37400	0.28259
11Mcyccpentan	287	98.189	547.04	34.47400	0.36160	0.37538	0.27397
1-ci2-MCC5	288	98.189	564.82	34.47400	0.36772	0.37064	0.26899
1-tr2-MCC5	289	98.189	553.15	34.47400	0.36160	0.37843	0.26899
1-ci3-MCC5	290	98.189	550.93	35.43900	0.36160	0.38249	0.28422
1-tr3-MCC5	291	98.189	553.15	34.47400	0.36160	0.37961	0.26330
1-ci2-ECC5	292	126.236	624.54	27.76500	0.47751	0.48899	0.32510
1-tr2-ECC5	293	126.236	617.87	27.05400	0.47751	0.49867	0.29989
11-Mcycchexan	294	112.208	590.93	29.64600	0.44900	0.42160	0.23800

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
335-Mheptane	0.38269	428.85	745.59	12.30	8.58206e+003	1.75580e+001
344-Mheptane	0.42704	434.26	760.04	12.12	1.02312e+004	1.12078e+001
345-Mheptane	0.43373	435.65	758.41	12.16	9.75647e+003	1.25561e+001
2M3i-Phexane	0.46083	439.87	749.95	12.34	7.80304e+003	1.84971e+001
22M-3Ehexane	0.43088	429.26	751.15	12.22	9.42709e+003	1.45979e+001
22M-4Ehexane	0.42408	420.37	736.65	12.37	8.34146e+003	1.98488e+001
23M-3Ehexane	0.42397	436.87	766.22	12.05	1.09387e+004	8.56698e+000
23M-4Ehexane	0.43044	434.04	758.00	12.15	9.91368e+003	1.22793e+001
24M-3Ehexane	0.42928	433.26	757.59	12.15	9.95284e+003	1.22624e+001
24M-4Ehexane	0.42943	434.26	758.81	12.14	1.00213e+004	1.18940e+001
25M-3Ehexane	0.43700	427.26	743.24	12.33	8.42541e+003	1.83684e+001
33M-4Ehexane	0.42267	436.04	766.22	12.04	1.10565e+004	8.30276e+000
34M-3Ehexane	0.42173	435.26	765.81	12.04	1.10938e+004	8.28923e+000
2233-Mhexane	0.36460	433.49	766.64	12.01	1.14939e+004	7.25483e+000
2234-Mhexane	0.42598	431.93	757.59	12.14	1.01389e+004	1.18427e+001
2235-Mhexane	0.42627	421.54	740.90	12.31	8.83917e+003	1.78696e+001
2244-Mhexane	0.42886	426.93	748.76	12.23	9.35679e+003	1.51818e+001
2245-Mhexane	0.42535	421.05	738.19	12.35	8.48460e+003	1.92085e+001
2255-Mhexane	0.37599	410.62	721.59	12.53	7.49940e+003	2.51133e+001
2334-Mhexane	0.42153	437.77	772.09	11.96	1.18381e+004	5.55395e+000
2335-Mhexane	0.42318	426.26	751.15	12.19	9.84513e+003	1.36589e+001
2344-Mhexane	0.42149	434.76	764.98	12.05	1.10190e+004	8.59656e+000
2345-Mhexane	0.42976	429.37	751.95	12.20	9.54432e+003	1.41936e+001
3344-Mhexane	0.42162	443.15	784.53	11.82	1.33399e+004	2.55530e-001
24M3iPpentan	0.41696	430.21	760.86	12.07	1.09453e+004	9.46352e+000
2M33Epentane	0.42285	442.87	781.92	11.86	1.29015e+004	1.63897e+000
223M3Epentan	0.42092	442.65	784.53	11.82	1.34126e+004	9.43102e-002
224M3Epentan	0.41459	428.43	760.04	12.07	1.10577e+004	9.35252e+000
234M3Epentan	0.42383	442.62	779.76	11.89	1.25435e+004	2.77725e+000
22334Mpentan	0.41729	439.23	782.36	11.82	1.35117e+004	2.17056e-001
22344Mpentan	0.41510	432.46	769.15	11.96	1.20900e+004	5.50785e+000
Cyclopropane	0.13050	240.37	420.54	17.99	6.19145e-007	-3.52391e+001
Cyclobutane	0.14508	285.66	698.39	11.47	4.67281e-007	-5.02483e+001
Spiro-C5	0.22100	312.20	746.30	11.06	-2.85120e-006	-4.14879e+001
1Mcyccpentene	0.21900	347.00	784.52	10.90	-3.69645e-006	-2.94729e+001
3Mcyccpentene	0.22100	343.20	976.39	8.72	-4.51533e-006	-4.32281e+001
Cycloheptane	0.30055	391.95	813.92	10.94	1.75598e-006	-7.61898e+001
Cyclooctane	0.35150	424.31	838.57	10.90	2.10390e+004	-2.94097e+001
Cyclononane	0.50145	451.54	852.75	10.94	2.20695e+004	-3.16726e+001
Cyclodecane	0.28029	475.37	860.02	11.04	2.21834e+004	-3.13357e+001
Eyclopentant	0.26890	376.62	769.57	11.42	6.37394e+003	-6.64740e+001
11Mcyccpentan	0.26910	360.63	757.59	11.43	1.38061e+004	-3.30013e+001
1-ci2-MCC5	0.26850	372.68	775.91	11.28	1.60785e+004	-1.39427e+001
1-tr2-MCC5	0.26890	365.02	754.76	11.52	1.41068e+004	-7.23898e+000
1-ci3-MCC5	0.28248	363.92	747.96	11.61	1.33262e+004	-4.69333e+000
1-tr3-MCC5	0.26758	364.87	751.95	11.56	1.38355e+004	-3.21176e+001
1-ci2-ECC5	0.35885	426.73	798.73	11.47	1.64469e+004	-1.18750e+001
1-tr2-ECC5	0.37860	420.70	784.97	11.61	1.49211e+004	-6.66816e+000
11-Mcycyhexan	0.23510	392.70	783.66	11.37	5.75155e+003	-2.95657e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
335-Mheptane	4.05013e-001	-9.84792e-005	-7.06172e-022	-5.02849e-025	1.00000e+000	0.16358
344-Mheptane	4.05724e-001	-9.91166e-005	6.47325e-022	-5.74685e-026	1.00000e+000	0.15015
345-Mheptane	4.05653e-001	-9.90454e-005	-4.41358e-022	1.43671e-025	1.00000e+000	0.15185
2M3i-Phexane	4.05228e-001	-9.86741e-005	-1.55946e-021	6.17786e-025	1.00000e+000	0.14790
22M-3Ehexane	4.05299e-001	-9.87267e-005	-2.20679e-021	6.32153e-025	1.00000e+000	0.16245
22M-4Ehexane	4.04559e-001	-9.80721e-005	2.73642e-021	-7.90191e-025	1.00000e+000	0.18242
23M-3Ehexane	4.06023e-001	-9.93812e-005	-3.29547e-021	4.74115e-025	1.00000e+000	0.14664
23M-4Ehexane	4.05626e-001	-9.90284e-005	4.11934e-022	-1.00570e-025	1.00000e+000	0.16053
24M-3Ehexane	4.05583e-001	-9.90097e-005	-3.03066e-021	5.31583e-025	1.00000e+000	0.15715
24M-4Ehexane	4.05653e-001	-9.90625e-005	-2.53045e-021	2.87342e-025	1.00000e+000	0.14981
25M-3Ehexane	4.04872e-001	-9.83724e-005	-2.11852e-021	7.47090e-025	1.00000e+000	0.16956
33M-4Ehexane	4.06023e-001	-9.93812e-005	2.11852e-021	-7.75824e-025	1.00000e+000	0.14880
34M-3Ehexane	4.06010e-001	-9.93642e-005	2.20679e-021	-1.86773e-025	1.00000e+000	0.15094
2233-Mhexane	4.06023e-001	-9.93997e-005	-4.70782e-022	3.01709e-025	1.00000e+000	0.14383
2234-Mhexane	4.05583e-001	-9.90097e-005	2.17737e-021	-2.01140e-025	1.00000e+000	0.15128
2235-Mhexane	4.04772e-001	-9.82672e-005	-8.23868e-022	5.74685e-026	1.00000e+000	0.17181
2244-Mhexane	4.05157e-001	-9.86214e-005	8.23868e-022	-2.15507e-025	1.00000e+000	0.16741
2245-Mhexane	4.04630e-001	-9.81419e-005	-1.67716e-021	2.44241e-025	1.00000e+000	0.17791
2255-Mhexane	4.03734e-001	-9.73636e-005	-4.41358e-022	3.16077e-025	1.00000e+000	0.20329
2334-Mhexane	4.06293e-001	-9.96302e-005	2.73642e-021	2.01140e-025	1.00000e+000	0.14034
2335-Mhexane	4.05299e-001	-9.87267e-005	-1.14753e-021	2.72975e-025	1.00000e+000	0.16166
2344-Mhexane	4.05939e-001	-9.93286e-005	-3.23662e-022	-2.15507e-025	1.00000e+000	0.08033
2345-Mhexane	4.05299e-001	-9.87623e-005	-4.85494e-021	1.19247e-024	1.00000e+000	0.15670
3344-Mhexane	4.06864e-001	-1.00143e-004	4.41358e-023	-7.18356e-026	1.00000e+000	0.13425
24M3iPpentan	4.05768e-001	-9.91522e-005	3.53086e-022	4.45381e-025	1.00000e+000	0.16110
2M33Epentane	4.06764e-001	-1.00037e-004	1.76543e-021	-3.16077e-025	1.00000e+000	0.14158
223M3Epentan	4.06864e-001	-1.00143e-004	-1.76543e-022	-1.00570e-025	1.00000e+000	0.13639
224M3Epentan	4.05724e-001	-9.91166e-005	3.64856e-021	-2.01140e-025	1.00000e+000	0.15974
234M3Epentan	4.06649e-001	-9.99490e-005	-1.98611e-021	-3.44811e-025	1.00000e+000	0.13549
22334Mpentan	4.06779e-001	-1.00056e-004	-2.01553e-021	8.47660e-025	1.00000e+000	0.13131
22344Mpentan	4.06153e-001	-9.95065e-005	3.29547e-021	-6.32153e-025	1.00000e+000	0.14979
Cyclopropane	1.90649e-001	-9.60326e-005	2.25873e-008	-3.31057e-021	1.00000e+000	0.19355
Cyclobutane	2.51200e-001	-1.18599e-004	2.61748e-008	-2.35170e-021	1.00000e+000	0.10541
Spiro-C5	2.69385e-001	-1.27536e-004	2.72898e-008	6.39871e-020	1.00000e+000	0.07521
1Mcympentene	2.48360e-001	-6.79330e-005	1.20214e-009	8.48047e-020	1.00000e+000	-0.02050
3Mcympentene	2.85848e-001	-1.09483e-004	1.74000e-008	1.07012e-019	1.00000e+000	-0.03519
Cycloheptane	3.93348e-001	-1.40132e-004	1.89021e-008	-9.82415e-021	1.00000e+000	-0.19562
Cyclooctane	3.22654e-001	-8.05941e-005	3.82867e-022	-7.02467e-025	1.00000e+000	-0.16448
Cyclononane	3.63497e-001	-9.11103e-005	-1.85346e-021	2.54932e-026	1.00000e+000	-0.15703
Cyclodecane	4.04182e-001	-1.01482e-004	3.06021e-021	-6.94009e-025	1.00000e+000	-0.20791
Eyclopentan	4.14682e-001	-2.08534e-004	6.87270e-008	-1.10929e-011	1.00000e+000	0.07305
11Mcympentan	3.25938e-001	-8.71325e-005	-8.76381e-009	7.22648e-012	1.00000e+000	0.02835
1-ci2-MCC5	2.80505e-001	-6.88625e-005	1.15739e-021	-2.67693e-025	1.00000e+000	0.01327
1-tr2-MCC5	2.79808e-001	-6.82390e-005	-2.57874e-021	4.36240e-025	1.00000e+000	0.02813
1-ci3-MCC5	2.79574e-001	-6.80308e-005	-1.04571e-021	2.67693e-025	1.00000e+000	0.03491
1-tr3-MCC5	3.25605e-001	-8.85361e-005	-7.59035e-009	6.96468e-012	1.00000e+000	0.03495
1-ci2-ECC5	3.61414e-001	-8.93506e-005	-2.16671e-021	6.11836e-025	1.00000e+000	-0.15749
1-tr2-ECC5	3.60972e-001	-8.88633e-005	1.78819e-021	-3.18665e-025	1.00000e+000	-0.15207
11-Mcychexan	3.07964e-001	4.28922e-005	-1.15581e-007	3.50657e-011	1.00000e+000	-0.79198

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
335-Mheptane	-0.16965	HC	
344-Mheptane	-0.17802	HC	
345-Mheptane	-0.18433	HC	
2M3i-Phexane	-0.19833	HC	
22M-3Ehexane	-0.16798	HC	
22M-4Ehexane	-0.14730	HC	
23M-3Ehexane	-0.17903	HC	
23M-4Ehexane	-0.17576	HC	
24M-3Ehexane	-0.17911	HC	
24M-4Ehexane	-0.17831	HC	
25M-3Ehexane	-0.16944	HC	
33M-4Ehexane	-0.17700	HC	
34M-3Ehexane	-0.17497	HC	
2233-Mhexane	-0.16482	HC	
2234-Mhexane	-0.16942	HC	
2235-Mhexane	-0.14733	HC	
2244-Mhexane	-0.15835	HC	
2245-Mhexane	-0.14620	HC	
2255-Mhexane	-0.10681	HC	
2334-Mhexane	-0.17362	HC	
2335-Mhexane	-0.15894	HC	
2344-Mhexane	-0.24808	HC	
2345-Mhexane	-0.16840	HC	
3344-Mhexane	-0.16861	HC	
24M3iPpentan	-0.16832	HC	
2M33Epentane	-0.17723	HC	
223M3Epentan	-0.16718	HC	
224M3Epentan	-0.16052	HC	
234M3Epentan	-0.17572	HC	
22334Mpentan	-0.16389	HC	
22344Mpentan	-0.15993	HC	
Cyclopropane	0.48357	HC	
Cyclobutane	0.07095	HC	-2567800
Spiro-C5	0.38024	HC	
1Mcycpentene	-0.25728	HC	
3Mcycpentene	-0.31873	HC	
Cycloheptane	-0.68967	HC	-4289600
Cyclooctane	-0.65468	HC	
Cyclononane	-0.64701	HC	-163880
Cyclodecane	-0.74471	HC	
Ecyclopentan	-0.19054	HC	-4322330
11Mcycpentan	-0.26197	HC	
1-ci2-MCC5	-0.27717	HC	-4280990
1-tr2-MCC5	-0.25916	HC	-4276090
1-ci3-MCC5	-0.24210	HC	
1-tr3-MCC5	-0.24086	HC	-4279000
1-ci2-ECC5	-0.42879	HC	-163880
1-tr2-ECC5	-0.41707	HC	-163880
11-Mcychexan	-1.52617	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
1-M-1-ECC5	295	112.208	592.04	29.88900	0.42166	0.43110	0.25000
1M-ci2-ECC5	296	112.208	595.93	29.88900	0.42096	0.43059	0.29229
1M-tr2-ECC5	297	112.208	588.15	29.38500	0.42096	0.43935	0.26949
1M-ci3-ECC5	298	112.208	587.04	29.38500	0.42096	0.44064	0.27559
1M-tr3-ECC5	299	112.208	587.59	28.97900	0.42096	0.44078	0.26660
112-MCC5	300	112.208	579.54	29.38500	0.41675	0.42550	0.25200
113-MCC5	301	112.208	569.54	28.26800	0.41675	0.43299	0.21096
1ci2ci3-MCC5	302	112.208	586.48	29.38500	0.41606	0.43178	0.29859
1ci2tr3-MCC5	303	112.208	579.82	28.97900	0.41606	0.43511	0.28290
1tr2ci3-MCC5	304	112.208	572.04	28.26800	0.41604	0.44297	0.25459
1ci2ci4-MCC5	305	112.208	579.82	28.87500	0.41604	0.43399	0.27700
1ci2tr4-MCC5	306	112.208	579.26	28.77900	0.41604	0.43959	0.24600
1tr2ci4-MCC5	307	112.208	570.93	28.11600	0.41604	0.44641	0.24616
Ecyclohexane	308	112.208	609.26	30.33600	0.44828	0.42269	0.24300
1-ci2-MCC6	309	112.208	605.93	29.64600	0.46228	0.42487	0.23600
1-tr2-MCC6	310	112.208	595.93	29.64600	0.46228	0.43658	0.33041
1-ci3-MCC6	311	112.208	590.93	29.64600	0.44826	0.44183	0.22400
1-tr3-MCC6	312	112.208	598.15	29.64600	0.46228	0.42129	0.18896
1-ci4-MCC6	313	112.208	598.15	29.64600	0.46228	0.43182	0.23398
1-tr4-MCC6	314	112.208	589.82	29.64600	0.44826	0.43189	0.23398
1c3c5MCC6	315	126.236	607.90	26.50000	0.47050	0.48944	0.27400
1c3t5MCC6	316	126.236	602.20	26.50000	0.47050	0.49015	0.33300
Ecycloheptane	317	126.236	654.26	29.38500	0.47200	0.48309	0.24950
Mcyclooctane	318	126.236	658.15	30.29500	0.46726	0.47473	0.22698
n-Pcyclopentan	319	112.208	603.15	29.99100	0.42515	0.43959	0.33500
i-Pcyclopentan	320	112.208	600.93	29.99100	0.42166	0.43783	0.23995
112-MCC6	321	126.236	622.87	27.76500	0.46884	0.48271	0.25479
113-MCC6	322	126.236	612.04	26.95100	0.46884	0.49678	0.23180
1tr2tr4-MCC6	323	126.236	613.71	26.75100	0.46805	0.50365	0.26190
n-Bcyclopentan	324	126.236	631.48	27.25400	0.48225	0.50202	0.30079
i-Bcyclopentan	325	126.236	625.65	27.35800	0.47830	0.50164	0.25769
sec-BCC5	326	126.236	633.71	27.35800	0.47830	0.49252	0.26668
tert-BCC5	327	126.236	622.04	27.76500	0.47437	0.49050	0.25679
1Mci2n-PCC5	328	126.236	623.43	27.40600	0.47751	0.49186	0.31760
1Mtr2n-PCC5	329	126.236	616.48	26.95100	0.47751	0.50151	0.29640
1Mci3i-PCC5	330	126.236	609.26	26.64800	0.47358	0.49722	0.29949
1Mtr3i-PCC5	331	126.236	609.26	26.64800	0.47358	0.49722	0.29949
diCycloC5	332	138.252	612.53	25.35400	0.54750	0.61608	0.60128
n-Bcyclohexane	333	140.268	667.04	31.50900	0.53408	0.56133	0.36199
i-Bcyclohexane	334	140.268	658.71	31.20600	0.52969	0.56085	0.31900
sec-BCC6	335	140.268	668.71	26.75100	0.52969	0.54746	0.26399
tert-BCC6	336	140.268	659.26	26.69600	0.52618	0.54363	0.25200
Pent-CC6	337	154.300	674.00	23.30000	0.58450	0.61298	0.41300
n-Hex-CC5	338	154.296	660.10	21.30000	0.64107	0.62561	0.47600
Phenyl-CC6	339	160.259	744.00	28.80000	0.55510	0.55043	0.37850
1-CC6-Octane	340	196.380	723.60	18.00000	0.75250	0.81289	0.53800
n-Pcyclohexane	341	126.236	639.26	28.06800	0.47672	0.48120	0.25799
i-Pcyclohexane	342	126.236	639.82	28.37100	0.47279	0.48701	0.23700
1M-4i-PCC6	343	140.268	654.26	25.58600	0.52530	0.55584	0.26370

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
1-M-1-ECC5	0.31716	394.68	784.09	11.38	1.65529e+004	-1.29926e+001
1M-ci2-ECC5	0.32422	401.21	788.03	11.39	1.62836e+004	-1.28801e+001
1M-tr2-ECC5	0.33636	394.37	771.67	11.56	1.46439e+004	-7.26883e+000
1M-ci3-ECC5	0.33954	394.26	769.57	11.59	1.43332e+004	-6.32023e+000
1M-tr3-ECC5	0.33954	394.26	769.57	11.59	1.43332e+004	-6.32023e+000
112-MCC5	0.25270	386.88	775.48	11.43	1.62668e+004	-1.12980e+001
113-MCC5	0.21728	378.04	751.15	11.71	1.37219e+004	-2.50278e+000
1ci2ci3-MCC5	0.32376	396.15	781.92	11.43	1.60087e+004	-1.15235e+001
1ci2tr3-MCC5	0.32466	390.65	773.36	11.50	1.54126e+004	-9.16796e+000
1tr2ci3-MCC5	0.32480	383.56	756.38	11.69	1.37455e+004	-3.30867e+000
1ci2ci4-MCC5	0.32106	389.91	774.63	11.47	1.57147e+004	-9.98772e+000
1ci2tr4-MCC5	0.33173	389.89	766.64	11.59	1.44703e+004	-6.24303e+000
1tr2ci4-MCC5	0.32605	382.44	750.35	11.77	1.30049e+004	-8.10737e-001
Ecyclohexane	0.24966	404.94	790.68	11.38	1.61984e+004	-1.30270e+001
1-ci2-MCC6	0.30794	402.89	799.18	11.24	8.57056e+003	-5.08389e+001
1-tr2-MCC6	0.33041	396.58	778.47	11.48	3.75483e-006	-6.84761e+001
1-ci3-MCC6	0.33785	393.24	768.73	11.59	8.78913e+003	-5.41515e+001
1-tr3-MCC6	0.26758	397.61	787.59	11.36	8.20465e+003	-5.50155e+001
1-ci4-MCC6	0.32016	397.48	785.84	11.38	8.20465e+003	-5.50155e+001
1-tr4-MCC6	0.33748	392.51	765.39	11.64	5.86938e+003	-3.03298e+001
1c3c5MCC6	0.27400	411.70	774.41	11.69	-2.35599e-006	-5.97291e+001
1c3t5MCC6	0.33300	413.70	783.11	11.57	-6.95225e-006	-6.12346e+001
Ecycloheptane	0.34729	436.48	816.27	11.30	1.80833e+004	-1.78372e+001
Mcyclooctane	0.37002	435.15	837.08	11.01	2.18199e+004	-2.88449e+001
n-Pcyclopentane	0.34698	404.11	779.33	11.54	1.45377e+004	-8.00153e+000
i-Pcyclopentane	0.33597	399.58	779.33	11.50	1.51391e+004	-9.31853e+000
112-MCC6	0.33237	418.37	802.82	11.33	1.83610e+004	-1.66000e+001
113-MCC6	0.35815	409.79	781.49	11.56	1.58969e+004	-8.29825e+000
1tr2tr4-MCC6	0.37358	414.39	774.63	11.71	1.40637e+004	-3.30232e+000
n-Bcyclopentane	0.39072	429.77	787.15	11.66	1.40463e+004	-5.02292e+000
i-Bcyclopentane	0.38113	421.12	783.66	11.64	1.46510e+004	-5.86655e+000
sec-BCC5	0.36414	427.52	797.38	11.49	1.61014e+004	-1.09357e+001
tert-BCC5	0.35148	418.02	793.79	11.46	1.68361e+004	-1.20554e+001
1Mci2n-PCC5	0.36583	425.75	795.13	11.51	1.59651e+004	-1.03309e+001
1Mtr2n-PCC5	0.37964	419.54	780.19	11.67	1.42835e+004	-4.57416e+000
1Mci3i-PCC5	0.37062	415.37	782.36	11.60	1.52417e+004	-6.98148e+000
1Mtr3i-PCC5	0.37062	415.37	782.36	11.60	1.52417e+004	-6.98148e+000
diCycloC5	0.60128	445.74	736.64	12.61	-2.03530e-004	-9.12018e+001
n-Bcyclohexane	0.42513	454.13	801.45	11.67	1.46664e+004	-5.69052e+000
i-Bcyclohexane	0.41571	444.44	797.38	11.64	1.53243e+004	-6.51754e+000
sec-BCC6	0.39436	452.45	815.33	11.45	1.74634e+004	-1.39731e+001
tert-BCC6	0.38223	444.72	815.33	11.39	1.86416e+004	-1.65090e+001
Pent-CC6	0.41300	476.90	806.81	11.78	-5.17533e-006	-6.54800e+001
n-Hex-CC5	0.47600	476.30	800.09	11.87	-1.83240e-005	-5.83191e+001
Phenyl-CC6	0.37850	513.27	946.26	10.29	-1.91580e-005	-9.55600e+001
1-CC6-Octane	0.53800	536.80	816.59	12.11	-4.94235e-006	-6.64629e+001
n-Pcyclohexane	0.26539	429.89	796.03	11.53	1.55384e+004	-9.51804e+000
i-Pcyclohexane	0.34632	427.93	804.65	11.39	1.72969e+004	-1.45294e+001
1M-4i-PCC6	0.40806	443.87	801.45	11.58	1.61659e+004	-8.98808e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
1-M-1-ECC5	3.20859e-001	-7.89603e-005	7.07724e-022	-1.58622e-025	1.00000e+000	-0.04417
1M-ci2-ECC5	3.20971e-001	-7.90859e-005	-2.87731e-021	6.23156e-025	1.00000e+000	-0.04098
1M-tr2-ECC5	3.20388e-001	-7.85530e-005	-3.71265e-021	1.12168e-024	1.00000e+000	-0.06253
1M-ci3-ECC5	3.20298e-001	-7.84857e-005	1.39224e-022	-6.79807e-026	1.00000e+000	-0.03530
1M-tr3-ECC5	3.20298e-001	-7.84857e-005	1.39224e-022	-6.79807e-026	1.00000e+000	-0.02990
112-MCC5	3.20522e-001	-7.86809e-005	-4.17673e-022	5.32515e-025	1.00000e+000	-0.03306
113-MCC5	3.19625e-001	-7.78573e-005	3.14415e-021	-5.43845e-025	1.00000e+000	-0.01343
1ci2ci3-MCC5	3.20768e-001	-7.88896e-005	5.80102e-022	2.60593e-025	1.00000e+000	-0.02735
1ci2tr3-MCC5	3.20466e-001	-7.86102e-005	-4.29275e-022	2.15272e-025	1.00000e+000	-0.02217
1tr2ci3-MCC5	3.19793e-001	-7.80391e-005	3.07454e-021	-5.32515e-025	1.00000e+000	0.02246
1ci2ci4-MCC5	3.20511e-001	-7.86529e-005	2.86570e-021	-7.13797e-025	1.00000e+000	-0.02104
1ci2tr4-MCC5	3.20196e-001	-7.83881e-005	-3.08614e-021	1.47292e-025	1.00000e+000	-0.01613
1tr2ci4-MCC5	3.19568e-001	-7.78293e-005	3.29498e-021	-1.09902e-024	1.00000e+000	0.09655
Ecyclohexane	3.21083e-001	-7.91690e-005	1.16020e-022	-9.06409e-026	1.00000e+000	-0.00236
1-ci2-MCC6	3.77018e-001	-5.10497e-005	-6.01262e-008	2.30101e-011	1.00000e+000	-0.08790
1-tr2-MCC6	4.56129e-001	-1.78492e-004	2.95232e-008	-2.07357e-020	1.00000e+000	-0.04608
1-ci3-MCC6	3.97462e-001	-8.97985e-005	-2.92466e-008	1.44688e-011	1.00000e+000	-0.03368
1-tr3-MCC6	4.22631e-001	-1.53464e-004	2.46629e-008	-9.04852e-013	1.00000e+000	-0.04568
1-ci4-MCC6	4.22631e-001	-1.53464e-004	2.46629e-008	-9.04852e-013	1.00000e+000	-0.08964
1-tr4-MCC6	3.25381e-001	1.44436e-005	-9.82814e-008	3.11900e-011	1.00000e+000	0.10813
1c3c5MCC6	4.64514e-001	-1.47398e-004	1.35928e-008	5.49483e-020	1.00000e+000	0.04085
1c3t5MCC6	4.73549e-001	-1.64661e-004	2.05414e-008	1.57646e-019	1.00000e+000	0.04961
Ecycheptane	3.62209e-001	-8.99477e-005	7.96202e-022	3.18665e-025	1.00000e+000	-0.03384
Mcycoctane	3.62966e-001	-9.06231e-005	3.71996e-021	-2.54932e-025	1.00000e+000	-0.03081
n-Pcycpntan	3.20679e-001	-7.88066e-005	4.24635e-021	-3.73894e-025	1.00000e+000	0.04409
i-Pcycpntan	3.20679e-001	-7.88066e-005	6.33471e-021	-1.24631e-024	1.00000e+000	0.06935
112-MCC6	3.61704e-001	-8.94920e-005	1.54020e-021	-8.28528e-025	1.00000e+000	-0.00709
113-MCC6	3.60846e-001	-8.87371e-005	-3.26312e-021	8.66767e-025	1.00000e+000	-0.04225
1tr2tr4-MCC6	3.60581e-001	-8.84859e-005	2.50608e-021	-5.48103e-025	1.00000e+000	-0.03617
n-Bcycpntan	3.61086e-001	-8.89416e-005	1.13557e-021	-5.09863e-026	1.00000e+000	-0.07229
i-Bcycpntan	3.60947e-001	-8.88166e-005	3.40670e-021	-1.07071e-024	1.00000e+000	-0.10683
sec-BCC5	3.61477e-001	-8.93038e-005	-1.56630e-022	4.07891e-025	1.00000e+000	-0.09730
tert-BCC5	3.61351e-001	-8.91777e-005	-2.33640e-021	3.56904e-025	1.00000e+000	-0.10378
1Mci2n-PCC5	3.61401e-001	-8.92244e-005	3.13260e-022	-1.91199e-025	1.00000e+000	-0.12026
1Mtr2n-PCC5	3.60781e-001	-8.86904e-005	2.04924e-021	1.52959e-025	1.00000e+000	-0.09182
1Mci3i-PCC5	3.60896e-001	-8.87699e-005	9.39780e-022	-6.75569e-025	1.00000e+000	-0.07946
1Mtr3i-PCC5	3.60896e-001	-8.87699e-005	9.39780e-022	-6.75569e-025	1.00000e+000	-0.07946
diCycloC5	6.88998e-001	-4.52063e-004	1.35299e-007	2.51279e-018	1.00000e+000	0.42342
n-Bcycchexane	4.01854e-001	-9.93863e-005	-1.04424e-021	-2.26615e-025	1.00000e+000	-0.12199
i-Bcycchexane	4.01657e-001	-9.92305e-005	3.21975e-021	-1.21806e-024	1.00000e+000	-0.08816
sec-BCC6	4.02289e-001	-9.99109e-005	2.63961e-021	-7.64826e-025	1.00000e+000	-0.03976
tert-BCC6	4.02289e-001	-9.99109e-005	-8.12189e-022	7.08173e-026	1.00000e+000	-0.02314
Pent-CC6	5.90449e-001	-2.27929e-004	3.64495e-008	1.16110e-019	1.00000e+000	-0.07052
n-Hex-CC5	5.63995e-001	-2.17863e-004	3.68243e-008	4.27132e-019	1.00000e+000	-0.06677
Phenyl-CC6	5.69336e-001	-2.29326e-004	3.78432e-008	2.94327e-013	1.00000e+000	-0.04156
1-CC6-Octane	7.27547e-001	-2.76073e-004	4.28843e-008	1.14860e-019	1.00000e+000	-0.09734
n-Pcycchexane	3.61438e-001	-8.92558e-005	-4.30732e-022	1.78452e-025	1.00000e+000	-0.03581
i-Pcycchexane	3.61780e-001	-8.95538e-005	-1.60546e-021	2.54932e-026	1.00000e+000	-0.03210
1M-4i-PCC6	4.01854e-001	-9.93863e-005	1.16027e-021	-1.41635e-025	1.00000e+000	-0.01522

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
1-M-1-ECC5	-0.34874	HC	
1M-ci2-ECC5	-0.35745	HC	-163880
1M-tr2-ECC5	-0.33504	HC	-163880
1M-ci3-ECC5	-0.34832	HC	-163880
1M-tr3-ECC5	-0.34305	HC	-163880
112-MCC5	-0.34435	HC	-163880
113-MCC5	-0.31538	HC	
1ci2ci3-MCC5	-0.35194	HC	-163880
1ci2tr3-MCC5	-0.34455	HC	
1tr2ci3-MCC5	-0.23138	HC	-163880
1ci2ci4-MCC5	-0.34204	HC	-163880
1ci2tr4-MCC5	-0.33544	HC	-163880
1tr2ci4-MCC5	-0.19562	HC	-163880
Ecyclohexane	-0.32354	HC	-4913240
1-ci2-MCC6	-0.52201	HC	
1-tr2-MCC6	-0.39408	HC	
1-ci3-MCC6	-0.42427	HC	
1-tr3-MCC6	-0.29484	HC	
1-ci4-MCC6	-0.46524	HC	
1-tr4-MCC6	-0.25088	HC	
1c3c5MCC6	-0.23989	HC	
1c3t5MCC6	-0.24972	HC	
Ecycloheptane	-0.35589	HC	-163880
Mcyclooctane	-0.33572	HC	
n-Pcyclopentan	-0.23077	HC	-4936950
i-Pcyclopentan	-0.21565	HC	
112-MCC6	-0.23522	HC	
113-MCC6	-0.39836	HC	
1tr2tr4-MCC6	-0.40204	HC	-163880
n-Bcyclopentan	-0.40147	HC	-5503700
i-Bcyclopentan	-0.43463	HC	
sec-BCC5	-0.42469	HC	
tert-BCC5	-0.42993	HC	-163880
1Mci2n-PCC5	-0.47576	HC	
1Mtr2n-PCC5	-0.43687	HC	
1Mci3i-PCC5	-0.43046	HC	-163880
1Mtr3i-PCC5	-0.43046	HC	-163880
diCycloC5	0.34465	HC	
n-Bcyclohexane	-0.44312	HC	-6143100
i-Bcyclohexane	-0.40834	HC	
sec-BCC6	-0.38424	HC	
tert-BCC6	-0.36050	HC	
Pent-CC6	-0.46232	HC	
n-Hex-CC5	-0.48965	HC	
Phenyl-CC6	-0.50081	HC	-6574800
1-CC6-Octane	-0.61591	HC	
n-Pcyclohexane	-0.36265	HC	-5527350
i-Pcyclohexane	-0.38295	HC	-5480000
1M-4i-PCC6	-0.36787	HC	-163880

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
Propadiene	344	40.065	393.15	54.71500	0.16200	0.16550	0.15960
Cyclobutene	345	54.090	446.30	52.70000	0.19550	0.20353	0.18900
2E1C4=	346	84.160	510.40	32.70000	0.35350	0.34274	0.26700
3M1C5=	347	84.160	495.30	32.70000	0.34650	0.34917	0.26200
Cyclopentene	348	68.118	507.00	48.02000	0.24500	0.24305	0.19586
cis2-Pentene	349	70.135	475.93	36.54100	0.30206	0.28749	0.24060
tr2-Pentene	350	70.135	475.37	36.54100	0.30206	0.29289	0.23725
12Pentadiene	351	68.119	503.15	40.73400	0.27595	0.26919	0.17294
1-ci3-C5==	352	68.119	498.70	40.12600	0.27636	0.26910	0.18690
1-tr3-C5==	353	68.119	496.48	39.92100	0.27636	0.27417	0.17497
23Pentadiene	354	68.120	505.80	41.40000	0.27550	0.27001	0.20400
14Pentadiene	355	68.119	477.59	37.89300	0.27636	0.27671	0.10400
2M1C5=	356	84.160	506.50	32.70000	0.35350	0.34645	0.26700
1-Hexene	357	84.162	502.00	31.71400	0.34999	0.35089	0.28499
cis2-hexene	358	84.162	517.59	32.82600	0.35091	0.34470	0.25600
tr2-Hexene	359	84.162	516.48	32.68800	0.35091	0.34909	0.24199
cis3-Hexene	360	84.162	517.04	32.82600	0.35091	0.34650	0.22495
tr3-Hexene	361	84.162	517.59	32.82600	0.35091	0.34729	0.22698
15-Hexadiene	362	82.146	520.93	34.45300	0.33327	0.33059	0.15997
1-Heptene	363	98.189	537.20	28.37100	0.43999	0.41130	0.35800
1-Octene	364	112.208	566.60	26.24300	0.46399	0.47099	0.38600
cis2-Octene	365	112.208	581.48	27.76500	0.46437	0.47040	0.34150
tr2-Octene	366	112.208	580.37	27.66100	0.46437	0.46740	0.34999
tr3-Octene	367	112.208	578.15	27.46100	0.46437	0.47479	0.33599
cis4-Octene	368	112.208	577.59	27.35800	0.46437	0.47062	0.33070
tr4-Octene	369	112.208	577.59	27.35800	0.46437	0.47514	0.32730
26-Octadiene	370	110.194	617.00	28.67500	0.47461	0.45407	0.12347
1-Nonene	371	126.236	592.04	23.44100	0.58310	0.53329	0.43000
1-Decene	372	140.246	614.82	22.06300	0.64780	0.60130	0.49099
2M-1-butene	373	70.135	465.37	34.47400	0.28999	0.28870	0.23194
3M-1-butene	374	70.135	450.37	35.16300	0.30206	0.29398	0.20900
2M-2-butene	375	70.135	470.37	34.47400	0.31957	0.28830	0.28499
2M-2-pentene	376	84.162	517.59	32.82600	0.35091	0.34713	0.27213
4Mci2pentene	377	84.160	490.00	30.30000	0.36000	0.34911	0.29000
4Mtr2pentene	378	84.160	492.00	30.30000	0.36000	0.35026	0.29000
3Mci2pentene	379	84.162	517.59	32.82600	0.35091	0.34323	0.26618
3Mtr2pentene	380	84.162	521.48	32.92900	0.35091	0.34240	0.26901
23M-1-butene	381	84.162	500.93	32.42600	0.34303	0.34250	0.25001
33M-1-butene	382	84.162	490.37	31.50900	0.34303	0.34659	0.13786
23M-2-butene	383	84.162	524.26	33.63900	0.35091	0.33790	0.26815
4M-1-pentene	384	84.161	496.00	32.20000	0.34498	0.34935	0.23890
44M1-pentene	385	98.189	526.48	28.57100	0.40020	0.41181	0.18174
233M1-butene	386	98.189	532.59	28.97900	0.40020	0.39140	0.19268
23M2-pentene	387	98.189	556.48	30.29500	0.40755	0.39609	0.25330
2M-1-heptene	388	112.208	573.15	27.15100	0.46437	0.46909	0.32530
23M-2-hexene	389	112.208	577.59	27.35800	0.46437	0.45100	0.32220
233M1pentene	390	112.208	569.26	26.86100	0.45666	0.45350	0.23350
244M1pentene	391	112.208	559.82	26.44800	0.45666	0.45100	0.22258
244M2pentene	392	112.208	563.15	26.54400	0.45666	0.44929	0.23620

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
Propadiene	0.14300	238.70	655.59	11.51	5.54898e+002	2.15148e+001
Cyclobutene	0.18900	275.80	710.35	11.15	-2.67126e-006	-2.76860e+001
2E1C4=	0.26700	337.80	694.06	12.21	-2.54930e-006	-1.32819e+001
3M1C5=	0.26200	327.30	672.35	12.47	-4.06975e-006	3.27600e+000
Cyclopentene	0.19586	317.38	776.52	10.69	0.00000e+000	1.13167e+001
cis2-Pentene	0.24255	310.08	659.58	12.48	0.00000e+000	3.84978e-001
tr2-Pentene	0.23984	309.49	652.26	12.62	0.00000e+000	1.84799e+001
12Pentadiene	0.17599	317.99	696.33	11.92	9.12795e+003	2.69411e+000
1-ci3-C5==	0.18490	317.20	694.96	11.94	9.12250e+003	2.93579e+000
1-tr3-C5==	0.18298	315.17	679.90	12.18	8.41610e+003	6.96783e+000
23Pentadiene	0.20400	321.40	699.80	11.91	3.18400e-008	1.24979e+001
14Pentadiene	0.18919	299.11	664.54	12.24	9.19607e+003	8.11979e+000
2M1C5=	0.26700	335.30	684.58	12.35	-4.67532e-006	1.85200e+000
1-Hexene	0.28499	336.60	671.65	12.60	1.27542e-006	-1.74600e+000
cis2-hexene	0.25090	342.03	690.54	12.32	8.22782e+003	1.12777e+001
tr2-Hexene	0.25319	341.03	681.21	12.48	7.76914e+003	1.42989e+001
cis3-Hexene	0.23180	339.59	683.19	12.42	8.01633e+003	1.32974e+001
tr3-Hexene	0.21525	340.23	680.55	12.48	7.81265e+003	1.43496e+001
15-Hexadiene	0.24435	332.60	695.64	12.12	9.35637e+003	7.09203e+000
1-Heptene	0.36390	366.80	695.61	12.52	1.90603e-006	-3.30298e+000
1-Octene	0.38760	394.40	713.57	12.50	7.12723e+003	-6.05452e+000
cis2-Octene	0.38398	398.80	727.16	12.31	7.83930e+003	1.43735e+001
tr2-Octene	0.34310	398.15	723.07	12.38	7.43636e+003	1.60343e+001
tr3-Octene	0.37961	396.43	718.29	12.44	7.09974e+003	1.76836e+001
cis4-Octene	0.37828	395.70	724.18	12.33	7.84446e+003	1.49010e+001
tr4-Octene	0.37775	395.41	717.19	12.45	7.09379e+003	1.78972e+001
26-Octadiene	0.35166	397.65	746.78	11.98	1.03386e+004	5.11090e+000
1-Nonene	0.43270	420.04	732.06	12.44	6.83543e+003	1.97673e+001
1-Decene	0.49750	443.75	743.63	12.48	6.24753e+003	2.27337e+001
2M-1-butene	0.23544	304.30	654.38	12.50	0.00000e+000	1.05553e+001
3M-1-butene	0.22660	293.20	631.27	12.80	0.00000e+000	2.17278e+001
2M-2-butene	0.28518	311.70	666.11	12.38	0.00000e+000	1.17966e+001
2M-2-pentene	0.27213	340.45	689.86	12.31	8.34203e+003	1.11674e+001
4Mci2pentene	0.29000	329.60	673.99	12.47	-5.26216e-006	-1.02079e+001
4Mtr2pentene	0.29000	331.70	673.52	12.50	1.00525e-006	1.26060e+001
3Mci2pentene	0.26618	340.84	696.67	12.20	8.79071e+003	8.86141e+000
3Mtr2pentene	0.26901	343.58	700.82	12.16	8.83448e+003	8.03746e+000
23M-1-butene	0.22416	328.76	681.54	12.32	9.02047e+003	1.13619e+001
33M-1-butene	0.14990	314.39	657.12	12.59	9.58166e+003	1.64957e+001
23M-2-butene	0.26815	346.35	711.41	12.01	9.46737e+003	4.91799e+000
4M-1-pentene	0.23890	327.01	668.66	12.53	0.00000e+000	3.00344e+001
44M1-pentene	0.28839	345.66	685.51	12.45	8.81794e+003	1.61521e+001
233M1-butene	0.19810	351.03	707.85	12.12	1.01006e+004	8.49481e+000
23M2-pentene	0.31101	370.55	730.93	11.95	1.03540e+004	4.16665e+000
2M-1-heptene	0.37152	392.43	723.44	12.31	8.13721e+003	1.43626e+001
23M-2-hexene	0.32559	394.93	744.02	12.00	1.04833e+004	5.71104e+000
233M1pentene	0.32771	381.46	738.19	11.95	1.13888e+004	4.58032e+000
244M1pentene	0.22066	374.59	717.92	12.21	9.64450e+003	1.19612e+001
244M2pentene	0.23630	378.06	724.92	12.13	1.00655e+004	9.74100e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
Propadiene	6.63072e-002	-7.31163e-007	-1.33414e-008	3.87181e-012	1.00000e+000	0.17294
Cyclobutene	1.95005e-001	-8.80428e-005	1.78373e-008	6.25616e-020	1.00000e+000	0.06578
2E1C4=	3.00994e-001	-1.33903e-004	2.84572e-008	5.93051e-020	1.00000e+000	0.10935
3M1C5=	2.84280e-001	-1.24006e-004	2.56897e-008	9.47734e-020	1.00000e+000	0.11348
Cyclopentene	9.40191e-002	1.00276e-004	-1.05474e-007	2.85108e-011	1.00000e+000	0.01492
cis2-Pentene	1.89315e-001	-3.36779e-005	-1.62395e-008	6.61714e-012	1.00000e+000	-0.02034
tr2-Pentene	1.62004e-001	-1.21969e-005	-2.50189e-008	8.08208e-012	1.00000e+000	-0.22291
12Pentadiene	1.92626e-001	-4.60107e-005	-1.49319e-021	3.50791e-025	1.00000e+000	-0.07035
1-ci3-C5==	1.92572e-001	-4.59767e-005	6.76161e-022	1.10052e-025	1.00000e+000	-0.07390
1-tr3-C5==	1.92164e-001	-4.55944e-005	-1.42276e-021	1.37565e-025	1.00000e+000	-0.06627
23Pentadiene	1.73389e-001	-5.83731e-005	8.35029e-009	-1.81059e-022	1.00000e+000	0.08693
14Pentadiene	1.91707e-001	-4.51885e-005	7.18421e-022	6.87826e-026	1.00000e+000	-0.08141
2M1C5=	2.65830e-001	-9.95764e-005	1.63947e-008	1.10925e-019	1.00000e+000	0.12302
1-Hexene	2.65448e-001	-9.67652e-005	1.51346e-008	-6.76680e-021	1.00000e+000	-0.02974
cis2-hexene	2.37800e-001	-5.66692e-005	-1.11387e-021	3.39927e-025	1.00000e+000	-0.07427
tr2-Hexene	2.37463e-001	-5.63755e-005	2.22775e-021	-2.63444e-025	1.00000e+000	-0.06450
cis3-Hexene	2.37539e-001	-5.64387e-005	-8.87618e-022	2.03956e-025	1.00000e+000	-0.06849
tr3-Hexene	2.37446e-001	-5.63545e-005	-1.00945e-021	1.86960e-025	1.00000e+000	-0.06507
15-Hexadiene	2.32266e-001	-5.54643e-005	2.53111e-021	-6.05504e-025	1.00000e+000	0.09668
1-Heptene	3.14850e-001	-1.17066e-004	1.90171e-008	-1.05260e-020	1.00000e+000	0.05632
1-Octene	3.67089e-001	-1.43413e-004	2.82321e-008	-1.57087e-012	1.00000e+000	0.07963
cis2-Octene	3.18648e-001	-7.69922e-005	3.66624e-021	-9.17739e-025	1.00000e+000	0.03549
tr2-Octene	3.18480e-001	-7.68385e-005	-3.38779e-021	6.57147e-025	1.00000e+000	0.03743
tr3-Octene	3.18278e-001	-7.66567e-005	8.81755e-022	-4.07884e-025	1.00000e+000	0.03613
cis4-Octene	3.18502e-001	-7.68800e-005	2.08837e-022	4.98525e-025	1.00000e+000	0.02785
tr4-Octene	3.18232e-001	-7.66141e-005	9.28163e-022	-4.30544e-025	1.00000e+000	0.03041
26-Octadiene	3.13711e-001	-7.63088e-005	-1.45841e-021	1.11268e-026	1.00000e+000	-0.00971
1-Nonene	3.58700e-001	-8.68208e-005	-1.56630e-022	-3.31411e-025	1.00000e+000	0.05325
1-Decene	3.99111e-001	-9.69782e-005	1.65313e-021	-2.26580e-025	1.00000e+000	0.04989
2M-1-butene	1.99850e-001	1.16754e-004	2.68411e-008	-5.66546e-026	1.00000e+000	-0.07136
3M-1-butene	1.94470e-001	-1.20282e-004	3.24842e-008	8.49819e-026	1.00000e+000	-0.01938
2M-2-butene	1.75442e-001	-6.69955e-005	4.70351e-009	-1.13309e-025	1.00000e+000	-0.03645
2M-2-pentene	2.37757e-001	-5.66482e-005	-1.63600e-021	5.43884e-025	1.00000e+000	-0.07594
4Mci2pentene	2.88004e-001	-1.19920e-004	2.32492e-008	1.23775e-019	1.00000e+000	0.12776
4Mtr2pentene	2.57589e-001	-1.00212e-004	1.83215e-008	-2.38162e-020	1.00000e+000	0.12766
3Mci2pentene	2.38010e-001	-5.68569e-005	8.70214e-023	6.79854e-026	1.00000e+000	-0.08395
3Mtr2pentene	2.38136e-001	-5.69832e-005	5.04724e-022	-2.63444e-025	1.00000e+000	-0.09019
23M-1-butene	2.37463e-001	-5.63865e-005	-1.74043e-023	9.34800e-026	1.00000e+000	-0.03877
33M-1-butene	2.36579e-001	-5.55793e-005	-7.83192e-022	6.54360e-025	1.00000e+000	-0.04860
23M-2-butene	2.38498e-001	-5.72971e-005	-1.74043e-021	2.71942e-025	1.00000e+000	-0.01474
4M-1-pentene	1.57786e-001	4.66176e-005	-7.26188e-008	2.02360e-011	1.00000e+000	-0.04485
44M1-pentene	2.77227e-001	-6.59306e-005	-1.01525e-022	1.38804e-025	1.00000e+000	0.00193
233M1-butene	2.78110e-001	-6.67249e-005	2.84270e-022	5.55215e-025	1.00000e+000	0.03837
23M2-pentene	2.78955e-001	-6.74947e-005	1.13708e-021	-5.35386e-025	1.00000e+000	-0.00628
2M-1-heptene	3.18491e-001	-7.68519e-005	1.02098e-021	-5.66506e-025	1.00000e+000	0.05736
23M-2-hexene	3.19333e-001	-7.76060e-005	-2.64526e-021	3.51234e-025	1.00000e+000	0.04098
233M1pentene	3.19097e-001	-7.73961e-005	1.46186e-021	-1.35961e-025	1.00000e+000	0.05308
244M1pentene	3.18256e-001	-7.66421e-005	-2.32041e-021	-1.24631e-025	1.00000e+000	0.10726
244M2pentene	3.18445e-001	-7.69080e-005	1.20661e-021	1.01971e-025	1.00000e+000	0.09620

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
Propadiene	0.10486	HC	-2528570
Cyclobutene	0.07027	HC	
2E1C4=	-0.08606	HC	
3M1C5=	0.00508	HC	
Cyclopentene	-0.19492	HC	-2939300
cis2-Pentene	-0.11105	HC	-3150950
tr2-Pentene	-0.29504	HC	-3146440
12Pentadiene	-0.12081	HC	
1-ci3-C5==	-0.14598	HC	
1-tr3-C5==	-0.07945	HC	
23Pentadiene	-0.13206	HC	
14Pentadiene	-0.12522	HC	
2M1C5=	-0.06251	HC	
1-Hexene	-0.19199	HC	-3739400
cis2-hexene	-0.24187	HC	
tr2-Hexene	-0.22168	HC	
cis3-Hexene	-0.22197	HC	
tr3-Hexene	-0.21536	HC	
15-Hexadiene	-0.13222	HC	
1-Heptene	-0.11460	HC	-4348900
1-Octene	-0.15263	HC	-4960600
cis2-Octene	-0.18208	HC	
tr2-Octene	-0.17303	HC	
tr3-Octene	-0.17136	HC	
cis4-Octene	-0.21231	HC	
tr4-Octene	-0.18320	HC	
26-Octadiene	-0.20351	HC	-163880
1-Nonene	-0.21401	HC	-5568400
1-Decene	-0.25507	HC	-6178100
2M-1-butene	-0.29023	HC	-3141870
3M-1-butene	-0.28233	HC	-3149250
2M-2-butene	-0.16117	HC	-3135640
2M-2-pentene	-0.23894	HC	-3713500
4Mci2pentene	-0.14996	HC	
4Mtr2pentene	-0.15220	HC	
3Mci2pentene	-0.25683	HC	
3Mtr2pentene	-0.26539	HC	
23M-1-butene	-0.36599	HC	
33M-1-butene	-0.33423	HC	
23M-2-butene	-0.41271	HC	
4M-1-pentene	-0.24672	HC	-3732000
44M1-pentene	-0.13729	HC	
233M1-butene	-0.12204	HC	
23M2-pentene	-0.18580	HC	
2M-1-heptene	-0.15861	HC	
23M-2-hexene	-0.18476	HC	
233M1pentene	-0.14722	HC	
244M1pentene	-0.17881	HC	
244M2pentene	-0.18161	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
23M2-heptene	393	126.236	600.93	24.92400	0.52086	0.53232	0.36379
3M-12-C4==	394	68.119	496.48	39.92100	0.27594	0.27200	0.15340
4M-13-C5==	395	82.146	538.15	35.46600	0.33327	0.32802	0.22300
23M-13-C4==	396	82.146	527.04	35.36300	0.33327	0.32041	0.21209
2M-15-C6==	397	96.173	553.15	32.52100	0.39019	0.38978	0.20735
2M-24-C6==	398	96.173	582.04	34.14300	0.39019	0.38699	0.26690
24-M-13-C5==	399	96.173	489.26	29.38500	0.39019	0.36419	0.79531
3-M-15-C7==	400	110.194	583.15	27.96400	0.44297	0.45328	0.18614
25-M-15-C6==	401	110.194	583.71	27.96400	0.46086	0.44642	0.21340
25-M-24-C6==	402	110.194	602.04	29.17900	0.45535	0.44203	0.30649
2-E-1-C6=	403	112.208	572.00	30.60000	0.39899	0.46531	0.37990
2M3E-15-C6==	404	124.222	622.04	26.44800	0.50010	0.50441	0.23995
37-M-16-C8==	405	138.253	640.37	25.43400	0.55659	0.57687	0.25960
13-CC5==	406	66.102	507.00	51.50000	0.22495	0.22649	0.18330
DicycloC5==	407	132.205	650.00	30.59900	0.44499	0.42533	0.28510
1357CyOctrn	408	104.160	642.60	41.40000	0.34550	0.34081	0.24400
1-Undecene	409	154.296	637.00	19.80000	0.53947	0.68587	0.54316
1-Dodecene	410	168.324	657.00	18.50000	0.59548	0.73353	0.58363
1-Tridecene	411	182.350	674.00	17.00000	0.65148	0.80786	0.62734
1-Tetradecen	412	196.378	689.00	15.50000	0.70749	0.88200	0.67522
1-Pentadecen	413	210.404	704.00	14.50000	0.76349	0.95497	0.71188
1-Hexadecene	414	224.432	717.00	13.30000	0.81950	1.02918	0.75022
1-Heptadecen	415	238.440	730.50	13.34000	0.87550	1.12249	0.82999
1-Octadecene	416	252.485	742.90	12.45000	0.93150	1.19676	0.85518
1-Nonadecene	417	266.489	754.80	11.65000	0.98750	1.27980	0.87373
1-Eicosene	418	280.519	767.74	10.43200	1.13650	1.34089	0.88060
1-C21=	419	294.549	776.70	10.77600	1.24047	1.42323	0.90480
1-C22=	420	308.590	786.05	10.25200	1.29724	1.48599	0.92440
1-C23=	421	322.600	794.89	9.77600	1.35280	1.54909	0.93970
1-C24=	422	336.618	803.32	9.33300	1.40796	1.60491	0.95080
1-C25=	423	350.648	811.56	8.90800	1.46421	1.65479	0.95670
1-C26=	424	364.678	818.96	8.54200	1.51609	1.69859	0.95890
1-C27=	425	378.700	826.29	8.18800	1.56921	1.73678	0.95580
1-C28=	426	392.730	832.83	7.88700	1.61746	1.77072	0.94900
1-C29=	427	406.750	840.03	7.55400	1.67293	1.79893	0.93670
1-C30=	428	420.778	845.60	7.30900	1.71642	1.82221	0.92110
n-PBenzene	429	120.194	638.38	31.99800	0.43999	0.42982	0.34439
14-EBenzene	430	134.222	657.96	28.02600	0.47999	0.49318	0.40437
1M2-EBenzene	431	120.194	650.93	30.39900	0.45763	0.41547	0.29398
1M3-EBenzene	432	120.194	637.04	28.37100	0.48765	0.43342	0.36000
1M4-EBenzene	433	120.194	640.37	29.38500	0.47264	0.43639	0.32199
123-MBenzene	434	120.194	664.53	34.54300	0.43500	0.41830	0.36599
124-MBenzene	435	120.194	649.10	32.32300	0.43000	0.42789	0.37599
135-MBenzene	436	120.194	637.36	31.26800	0.43288	0.43369	0.39899
n-BBenzene	437	134.222	660.54	28.86800	0.49680	0.49211	0.39300
i-BBenzene	438	134.222	650.37	30.49900	0.47837	0.49439	0.37999
sec-BBenzene	439	134.222	664.54	29.50900	0.47837	0.47780	0.28468
tert-Bbenzen	440	134.222	659.82	29.64600	0.46077	0.47330	0.27755
o-Cymene	441	134.222	669.82	28.95800	0.47837	0.47167	0.28878

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
23M2-heptene	0.42008	418.26	737.42	12.34	7.76175e+003	1.64107e+001
3M-12-C4==	0.20790	313.98	690.20	11.98	9.11705e+003	3.66998e+000
4M-13-C5==	0.27169	350.15	722.70	11.86	9.91661e+003	1.73163e+000
23M-13-C4==	0.24670	341.92	729.79	11.66	1.15488e+004	-2.75795e+000
2M-15-C6==	0.29501	361.26	723.07	11.98	1.03145e+004	4.84960e+000
2M-24-C6==	0.33206	384.65	747.57	11.83	1.05453e+004	9.76516e-001
24-M-13-C5==	0.29850	361.25	739.35	11.72	1.16561e+004	-4.29372e-001
3-M-15-C7==	0.33381	384.15	732.06	12.08	1.00339e+004	8.03488e+000
25-M-15-C6==	0.33618	387.48	744.02	11.92	1.12200e+004	3.54339e+000
25-M-24-C6==	0.36412	407.65	764.15	11.80	1.15704e+004	6.13428e-003
2-E-1-C6=	0.37990	393.15	731.30	12.19	1.46915e+006	-3.52210e+001
2M3E-15-C6==	0.38005	418.15	765.39	11.89	1.18192e+004	2.53996e+000
37-M-16-C8==	0.42620	434.26	760.45	12.11	1.00095e+004	1.06691e+001
13-CC5==	0.17396	314.65	804.47	10.29	0.00000e+000	-2.51272e+001
DicycloC5==	0.35155	443.00	970.27	9.56	3.30827e-005	-1.49269e+002
1357CyOctrn	0.24400	413.20	924.48	9.80	-3.95320e-006	-4.16858e+001
1-Undecene	0.54316	465.80	753.40	12.52	3.56172e-006	2.78273e+001
1-Dodecene	0.56379	486.50	762.20	12.55	1.09704e-006	2.69184e+001
1-Tridecene	0.62734	505.90	769.10	12.60	7.30596e-007	2.60068e+001
1-Tetradecen	0.67522	524.30	774.10	12.67	4.61585e-006	2.50969e+001
1-Pentadecen	0.71188	541.50	779.00	12.73	4.48861e-006	2.41902e+001
1-Hexadecene	0.75022	557.00	783.90	12.77	8.67903e-007	2.32821e+001
1-Heptadecen	0.82999	573.50	786.80	12.85	3.33141e-007	2.23739e+001
1-Octadecene	0.85518	587.00	789.80	12.90	2.07043e-006	2.14650e+001
1-Nonadecene	0.87373	601.70	788.80	13.02	2.78175e-006	2.05560e+001
1-Eicosene	0.88510	615.50	798.79	12.95	3.32634e-006	1.96470e+001
1-C21=	0.88709	628.20	793.01	13.14	4.19691e-006	1.87380e+001
1-C22=	0.88160	640.40	795.07	13.19	7.52562e-006	1.78631e+001
1-C23=	0.86677	652.00	797.04	13.23	6.40171e-006	1.69199e+001
1-C24=	0.84438	663.20	798.80	13.28	-2.98468e-006	1.60110e+001
1-C25=	0.81203	674.30	800.37	13.33	2.20680e-006	1.51019e+001
1-C26=	0.77100	684.30	801.84	13.37	1.05338e-005	1.41929e+001
1-C27=	0.72188	694.30	803.22	13.41	-7.06079e-007	1.32840e+001
1-C28=	0.66799	703.20	804.59	13.44	-1.92949e-006	1.23749e+001
1-C29=	0.60483	713.20	805.77	13.49	9.31254e-006	1.14660e+001
1-C30=	0.53570	720.90	806.85	13.52	5.82344e-006	1.05569e+001
n-PBenzene	0.34319	432.39	864.76	10.64	2.55351e+004	-4.16592e+001
14-EBenzene	0.40437	456.94	864.76	10.84	2.45626e+004	-3.82935e+001
1M2-EBenzene	0.26600	438.33	883.15	10.46	5.62278e+003	-2.22119e+001
1M3-EBenzene	0.37900	434.48	867.41	10.62	5.31859e+003	-1.85700e+001
1M4-EBenzene	0.38299	435.16	863.70	10.67	5.16484e+003	-1.51310e+001
123-MBenzene	0.36419	449.27	897.61	10.38	-5.56979e+002	3.75726e+001
124-MBenzene	0.37450	442.50	879.70	10.54	-9.65999e+002	3.96879e+001
135-MBenzene	0.39739	437.89	867.95	10.64	-8.47175e-007	-1.95880e+001
n-BBenzene	0.39210	456.45	863.17	10.85	5.16757e-007	-2.29882e+001
i-BBenzene	0.39210	445.94	856.87	10.85	2.48512e+004	-3.71647e+001
sec-BBenzene	0.28169	446.48	865.33	10.74	2.65691e+004	-4.25751e+001
tert-Bbenzen	0.27099	442.30	869.89	10.65	2.76699e+004	-4.53938e+001
o-Cymene	0.28878	451.33	880.36	10.60	2.79853e+004	-4.78085e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
23M2-heptene	3.58952e-001	-8.70405e-005	2.84544e-021	-9.55993e-025	1.00000e+000	0.06227
3M-12-C4==	1.92457e-001	-4.58581e-005	-1.26780e-022	1.51322e-025	1.00000e+000	-0.11365
4M-13-C5==	2.33136e-001	-5.62413e-005	-3.39746e-022	5.47442e-025	1.00000e+000	0.05522
23M-13-C4==	2.33359e-001	-5.64353e-005	-1.86860e-021	-1.07830e-025	1.00000e+000	0.04593
2M-15-C6==	2.72966e-001	-6.58576e-005	-1.01429e-021	1.06820e-025	1.00000e+000	0.04975
2M-24-C6==	2.73803e-001	-6.66231e-005	-3.48040e-022	-4.85547e-026	1.00000e+000	0.01230
24-M-13-C5==	2.73543e-001	-6.63721e-005	1.54132e-021	-3.69016e-025	1.00000e+000	0.13865
3-M-15-C7==	3.13116e-001	-7.57877e-005	-1.09380e-021	2.11408e-025	1.00000e+000	0.05314
25-M-15-C6==	3.13601e-001	-7.62130e-005	-2.00531e-021	1.07930e-024	1.00000e+000	0.03761
25-M-24-C6==	3.14371e-001	-7.68984e-005	-1.15077e-021	1.78028e-025	1.00000e+000	0.01913
2-E-1-C6=	4.47978e-001	-2.39333e-004	8.11459e-008	-1.26923e-011	1.00000e+000	0.03205
2M3E-15-C6==	3.54443e-001	-8.67338e-005	-2.58170e-021	8.52939e-025	1.00000e+000	0.01601
37-M-16-C8==	3.94227e-001	-9.63245e-005	-3.80248e-021	2.37320e-025	1.00000e+000	-0.00696
13-CC5==	2.06028e-001	-8.12243e-005	1.02159e-008	1.56713e-012	1.00000e+000	0.13725
DicycloC5==	6.89112e-001	-4.68049e-004	1.82145e-007	-2.96775e-011	1.00000e+000	0.16411
1357CyOcttrn	3.42333e-001	-1.66620e-004	3.62347e-008	9.09657e-020	1.00000e+000	0.05609
1-Undecene	4.09409e-001	-6.88327e-005	-1.72244e-008	-1.99846e-020	1.00000e+000	0.01524
1-Dodecene	4.56907e-001	-8.69659e-005	-1.42499e-008	-6.36406e-021	1.00000e+000	0.06469
1-Tridecene	5.04397e-001	-1.05099e-004	-1.12749e-008	-4.43857e-021	1.00000e+000	0.00183
1-Tetradecen	5.51899e-001	-1.23233e-004	-8.29992e-009	-2.53218e-020	1.00000e+000	0.01745
1-Pentadecen	5.99399e-001	-1.41366e-004	-5.32488e-009	-2.49482e-020	1.00000e+000	0.13300
1-Hexadecene	6.46896e-001	-1.59499e-004	-2.34989e-009	-5.13959e-021	1.00000e+000	0.04184
1-Heptadecen	6.94397e-001	-1.77632e-004	6.24987e-010	-8.91039e-022	1.00000e+000	0.14312
1-Octadecene	7.41899e-001	-1.95766e-004	3.59988e-009	-1.10533e-020	1.00000e+000	0.06283
1-Nonadecene	7.89399e-001	-2.13899e-004	6.57487e-009	-1.51151e-020	1.00000e+000	0.13255
1-Eicosene	8.36898e-001	-2.32032e-004	9.54988e-009	-1.92039e-020	1.00000e+000	0.15679
1-C21=	8.84395e-001	-2.50165e-004	1.25248e-008	-2.48907e-020	1.00000e+000	-0.01779
1-C22=	9.33682e-001	-2.68812e-004	1.55295e-008	-3.92628e-020	1.00000e+000	-0.02089
1-C23=	9.79394e-001	-2.86432e-004	1.84749e-008	-3.35720e-020	1.00000e+000	-0.02395
1-C24=	1.02689e+000	-3.04565e-004	2.14498e-008	1.53008e-020	1.00000e+000	-0.02704
1-C25=	1.07440e+000	-3.22698e-004	2.44248e-008	-1.17762e-020	1.00000e+000	-0.02997
1-C26=	1.12190e+000	-3.40832e-004	2.73998e-008	-5.87794e-020	1.00000e+000	-0.03274
1-C27=	1.16940e+000	-3.58965e-004	3.03749e-008	3.92599e-021	1.00000e+000	-0.03775
1-C28=	1.21689e+000	-3.77098e-004	3.33498e-008	1.03594e-020	1.00000e+000	-0.03951
1-C29=	1.26439e+000	-3.95232e-004	3.63247e-008	-5.06184e-020	1.00000e+000	-0.04126
1-C30=	1.31189e+000	-4.13364e-004	3.92998e-008	-2.88453e-020	1.00000e+000	-0.04241
n-PBenzene	3.46495e-001	-8.70933e-005	1.57833e-021	1.82047e-025	1.00000e+000	-0.06093
14-EBenzene	3.86949e-001	-9.72581e-005	1.24904e-022	-3.79483e-025	1.00000e+000	0.00528
1M2-EBenzene	3.65666e-001	-1.57031e-004	3.40637e-008	2.11765e-012	1.00000e+000	-0.10293
1M3-EBenzene	3.29692e-001	-9.18542e-005	-1.30069e-008	9.97666e-012	1.00000e+000	-0.00448
1M4-EBenzene	3.18322e-001	-8.02110e-005	-1.80587e-008	1.07327e-011	1.00000e+000	-0.00058
123-MBenzene	1.68280e-001	1.08507e-004	-1.30887e-007	3.66563e-011	1.00000e+000	-0.93949
124-MBenzene	1.67130e-001	1.06074e-004	-1.27003e-007	3.51911e-011	1.00000e+000	-0.83644
135-MBenzene	3.36199e-001	-1.23043e-004	1.92494e-008	5.04434e-021	1.00000e+000	-0.00620
n-BBenzene	3.96699e-001	-1.46533e-004	2.14244e-008	-2.64726e-021	1.00000e+000	0.00004
i-BBenzene	3.86625e-001	-9.69735e-005	-5.70395e-021	9.21601e-025	1.00000e+000	-0.03803
sec-BBenzene	3.87002e-001	-9.73076e-005	1.85968e-021	-2.03294e-025	1.00000e+000	-0.12105
tert-Bbenzen	3.86962e-001	-9.73910e-005	-6.10642e-022	-5.42118e-026	1.00000e+000	-0.10937
o-Cymene	3.87432e-001	-9.77091e-005	3.35853e-021	-4.33695e-025	1.00000e+000	0.02420

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
23M2-heptene	-0.18941	HC	-163880
3M-12-C4==	-0.18646	HC	
4M-13-C5==	-0.14119	HC	
23M-13-C4==	-0.16234	HC	
2M-15-C6==	-0.14381	HC	
2M-24-C6==	-0.20261	HC	-163880
24-M-13-C5==	-0.22111	HC	-163880
3-M-15-C7==	-0.16708	HC	-163880
25-M-15-C6==	-0.19222	HC	
25-M-24-C6==	-0.24210	HC	
2-E-1-C6=	-0.18806	HC	
2M3E-15-C6==	-0.24695	HC	
37-M-16-C8==	-0.28211	HC	
13-CC5==	0.02816	HC	
DicycloC5==	-0.19764	HC	-5540000
1357CyOcttrn	-0.12372	HC	
1-Undecene	-0.33542	HC	
1-Dodecene	-0.34621	HC	
1-Tridecene	-0.41251	HC	
1-Tetradecen	-0.42458	HC	
1-Pentadecen	-0.38574	HC	
1-Hexadecene	-0.44609	HC	
1-Heptadecen	-0.40040	HC	
1-Octadecene	-0.44764	HC	
1-Nonadecene	-0.44240	HC	
1-Eicosene	-0.42392	HC	
1-C21=	-0.83244	HC	
1-C22=	-0.82371	HC	
1-C23=	-0.80829	HC	
1-C24=	-0.78680	HC	
1-C25=	-0.75787	HC	
1-C26=	-0.72188	HC	
1-C27=	-0.68567	HC	
1-C28=	-0.63656	HC	
1-C29=	-0.57757	HC	
1-C30=	-0.51266	HC	
n-PBenzene	-0.31213	HC	-5002760
14-EBenzene	-0.30421	HC	
1M2-EBenzene	-0.36561	HC	-4996150
1M3-EBenzene	-0.30963	HC	-4993050
1M4-EBenzene	-0.17892	HC	-4991660
123-MBenzene	-1.23477	HC	-4985350
124-MBenzene	-1.20053	HC	-4981000
135-MBenzene	-0.31343	HC	-4978850
n-BBenzene	-0.26712	HC	-5616750
i-BBenzene	-0.28264	HC	
sec-BBenzene	-0.38931	HC	
tert-Bbenzen	-0.37985	HC	
o-Cymene	-0.29745	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
m-Cymene	442	134.222	666.21	29.38500	0.47837	0.47955	0.28854
p-Cymene	443	134.222	650.00	27.30000	0.47837	0.48638	0.37299
1234-M-BZ	444	134.220	695.10	28.30000	0.48750	0.47126	0.36800
1235-M-BZ	445	134.210	662.20	28.77600	0.47391	0.55462	0.54100
1245-M-BZ	446	134.222	675.37	29.64600	0.47999	0.48530	0.42500
135-iP-BZ	447	204.360	692.87	18.37200	0.74950	0.79530	0.53140
n-Pentyl-BZ	448	148.240	679.93	26.06200	0.55524	0.55571	0.43763
n-Hexyl-BZ	449	162.274	697.50	23.80000	0.62000	0.63157	0.48000
n-Heptyl-BZ	450	176.289	713.54	21.99400	0.66816	0.69160	0.54098
n-Octyl-BZ	451	190.320	728.15	20.33900	0.72542	0.76064	0.59093
n-Nonyl-BZ	452	204.339	740.93	18.96100	0.77587	0.83576	0.65235
n-Decyl-BZ	453	218.369	752.00	17.85700	0.85000	0.90496	0.67500
n-Undecyl-BZ	454	232.389	764.00	16.60000	0.91000	0.98045	0.72200
n-Dodecyl-BZ	455	246.419	774.00	15.80000	0.98000	1.06013	0.77300
n-TridecylBZ	456	260.450	784.00	15.00000	1.03998	1.14099	0.81600
n-TtrdecylBZ	457	274.470	792.04	14.10000	1.11000	1.22645	0.86900
n-Pentdec-BZ	458	288.500	800.37	13.44400	1.05541	1.33441	0.97196
n-HexdecylBZ	459	302.519	808.15	12.89300	1.08711	1.43095	1.02987
13-iP-BZ	460	162.274	684.00	24.50000	0.60000	0.59658	0.35870
14-iP-BZ	461	162.274	689.00	24.50000	0.59798	0.60443	0.38999
Ethynyl-BZ	462	102.126	655.40	44.00000	0.33750	0.33210	0.23900
cis-C3=BZ	463	118.180	664.60	34.60000	0.41150	0.40285	0.31600
trans-C3=BZ	464	118.180	664.60	34.60000	0.41150	0.40410	0.31600
12-E-BZ	465	134.220	668.00	28.80000	0.50200	0.51446	0.33950
13-E-BZ	466	134.220	663.60	29.30000	0.48750	0.48884	0.35900
14-DiethylBZ	467	134.220	657.96	28.02600	0.49700	0.52140	0.40350
124-E-BZ	468	162.274	684.50	23.30000	0.59950	0.60643	0.47900
135-E-BZ	469	162.274	682.30	23.30000	0.59950	0.35368	0.47900
1234-E-BZ	470	190.330	708.20	19.30000	0.71150	0.72358	0.56200
1245-E-BZ	471	190.330	706.90	19.30000	0.71150	0.73040	0.56200
Penta-M-BZ	472	148.250	719.00	24.90000	0.54350	0.52373	0.40700
Penta-E-BZ	473	218.380	723.60	16.10000	0.82350	0.84703	0.63700
ci1-PH-1-C3=	474	118.179	677.59	36.26600	0.40792	0.39651	0.23781
tr1-PH-1-C3=	475	118.179	677.59	36.26600	0.40792	0.40735	0.32901
1-M-NaphtIn	476	142.199	772.04	36.60000	0.52300	0.45100	0.34780
2-M-NaphtIn	477	142.199	750.00	32.50000	0.50700	0.45794	0.34590
BiPhenyl	478	154.210	789.26	38.47300	0.50155	0.51542	0.36590
1BNaphthalen	479	184.279	781.45	24.97500	0.64626	0.64977	0.53200
Naphthalene	480	128.173	748.35	40.50900	0.40999	0.38343	0.30239
1PNaphthalen	481	170.250	704.62	13.86400	0.96991	0.79262	0.76800
c-Decalin	482	138.250	702.20	32.00000	0.47750	0.47970	0.28600
t-Decalin	483	138.250	687.00	20.80000	0.47750	0.49038	0.27000
12MNaphtaln	484	156.229	775.30	30.10000	0.52150	0.51104	0.44300
13MNaphtaln	485	156.229	773.80	30.10000	0.52150	0.51259	0.44300
14MNaphtaln	486	156.229	776.80	30.10000	0.52150	0.51191	0.44300
16MNaphthlen	487	156.229	770.60	30.10000	0.52150	0.51841	0.44300
17MNaphthlen	488	156.229	770.60	30.10000	0.52150	0.51359	0.44300
23MNaphthlen	489	156.229	777.80	30.10000	0.52150	0.51899	0.44300
1ENaphthalen	490	156.229	774.90	31.30000	0.52150	0.50886	0.39500

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
m-Cymene	0.28854	448.23	864.66	10.77	2.58377e+004	-4.05753e+001
p-Cymene	0.34000	450.28	859.96	10.84	2.49088e+004	-3.79580e+001
1234-M-BZ	0.36800	478.30	908.52	10.47	-4.72977e-006	4.84800e+000
1235-M-BZ	0.54100	471.20	800.23	11.83	1.15531e+004	2.12481e-001
1245-M-BZ	0.42500	469.99	889.83	10.63	2.68699e+004	-4.72460e+001
135-iP-BZ	0.53140	511.15	852.78	11.41	-1.11217e-004	-2.11002e+001
n-Pentyl-BZ	0.43763	478.55	862.80	11.03	-1.80215e-004	-4.10137e+001
n-Hexyl-BZ	0.54098	499.30	860.68	11.21	-2.85276e-006	-4.37413e+001
n-Heptyl-BZ	0.54098	519.15	859.41	11.38	-1.46940e-004	-4.28310e+001
n-Octyl-BZ	0.59093	537.54	860.30	11.50	-8.31858e-005	-4.37409e+001
n-Nonyl-BZ	0.65235	555.15	859.90	11.63	-1.29224e-004	-4.46481e+001
n-Decyl-BZ	0.67500	571.10	857.85	11.77	-1.96817e-004	-4.55583e+001
n-Undecyl-BZ	0.72200	586.40	857.72	11.87	-2.40416e-004	-4.64655e+001
n-Dodecyl-BZ	0.77300	600.80	857.60	11.97	-1.75770e-004	-4.73758e+001
n-TridecylBZ	0.81600	614.40	856.48	12.07	-2.17066e-004	-4.82854e+001
n-TtrdecylBZ	0.86900	627.20	856.39	12.16	-3.22769e-004	-4.91933e+001
n-Pentdec-BZ	0.97196	639.26	858.60	12.21	-9.18486e-005	-5.01026e+001
n-HexdecylBZ	1.02987	650.93	858.60	12.28	-3.86278e-004	-5.10108e+001
13-iP-BZ	0.35870	476.33	862.07	11.02	0.00000e+000	-7.26236e+001
14-iP-BZ	0.38999	483.65	859.78	11.11	0.00000e+000	-7.26238e+001
Ethynyl-BZ	0.23900	418.40	933.78	9.74	1.22953e-006	-3.83433e+001
cis-C3=BZ	0.31600	443.20	912.41	10.17	-6.44014e-006	-2.43320e+001
trans-C3=BZ	0.31600	443.20	909.58	10.20	-2.46352e-006	-2.93488e+001
12-E-BZ	0.61337	456.61	883.03	10.61	2.22310e-006	3.17563e+001
13-E-BZ	0.35900	454.30	863.62	10.83	-3.59182e-006	-3.50498e+001
14-DiethylBZ	0.60467	456.94	865.41	10.83	-1.42849e-006	2.63234e+001
124-E-BZ	0.47900	490.70	877.09	10.94	-2.66621e-006	-1.35713e+001
135-E-BZ	0.47900	489.20	1502.56	6.38	-7.19396e-006	-2.52005e+001
1234-E-BZ	0.56200	524.20	890.65	11.01	-1.24508e-005	-6.94400e+000
1245-E-BZ	0.56200	523.20	881.93	11.11	-6.39221e-006	2.01396e+001
Penta-M-BZ	0.40700	505.10	920.17	10.53	-7.04748e-006	-3.84999e-001
Penta-E-BZ	0.63700	550.20	897.37	11.11	-5.75130e-006	-1.50920e+001
ci1-PH-1-C3=	0.23781	440.61	912.24	10.15	3.06779e+004	-6.04247e+001
tr1-PH-1-C3=	0.32901	451.44	909.89	10.26	2.88617e+004	-5.60876e+001
1-M-Naphtln	0.34780	517.83	1024.01	9.54	-7.29866e-007	-1.08445e+001
2-M-Naphtln	0.34590	514.20	1004.90	9.70	-1.04477e-006	-3.36989e+000
BiPhenyl	0.54380	528.15	1029.44	9.55	1.97497e+004	7.88908e+001
1BNaphthalen	0.53200	562.49	973.80	10.31	0.00000e+000	-6.08839e+001
Naphthalene	0.30000	491.14	969.05	9.90	0.00000e+000	-6.87890e+001
1PNaphthalen	0.76800	547.65	772.82	12.88	0.00000e+000	1.26793e+001
c-Decalin	0.28600	468.60	901.20	10.48	-6.89912e-006	-1.09738e+002
t-Decalin	0.27000	460.40	873.26	10.76	-7.87674e-006	-9.76288e+001
12MNaphtaln	0.44300	539.50	1021.01	9.70	-5.41279e-006	-5.94623e+001
13MNaphtaln	0.44300	538.50	1017.51	9.73	-2.29746e-006	-5.17634e+001
14MNaphtaln	0.44300	540.50	1019.70	9.72	-5.41279e-006	-5.94623e+001
16MNaphthlen	0.44300	536.20	1005.19	9.83	-2.29746e-006	-5.17634e+001
17MNaphthlen	0.44300	536.20	1014.59	9.74	-2.29746e-006	-5.17634e+001
23MNaphthlen	0.44300	541.20	1006.03	9.85	-5.46816e-006	-3.20454e+001
1ENaphthalen	0.39500	531.50	1011.28	9.74	-7.51871e-006	-6.37975e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
m-Cymene	3.86895e-001	-9.72245e-005	7.35546e-022	-1.49083e-025	1.00000e+000	0.01501
p-Cymene	3.86761e-001	-9.71077e-005	-3.62222e-021	9.75813e-025	1.00000e+000	0.03257
1234-M-BZ	3.66414e-001	-1.35739e-004	2.13933e-008	1.11902e-019	1.00000e+000	-0.03655
1235-M-BZ	3.84443e-001	-9.50497e-005	1.05465e-021	-2.71035e-025	1.00000e+000	-0.19821
1245-M-BZ	3.87808e-001	-9.80272e-005	1.47109e-021	-7.04754e-025	1.00000e+000	-0.03304
135-iP-BZ	6.24375e-001	-2.32977e-004	3.53749e-008	1.37059e-018	1.00000e+000	0.45810
n-Pentyl-BZ	4.84933e-001	-2.01921e-004	3.62976e-008	2.21515e-018	1.00000e+000	-0.00968
n-Hexyl-BZ	5.38284e-001	-2.28490e-004	4.31444e-008	1.53380e-020	1.00000e+000	-0.01021
n-Heptyl-BZ	5.79903e-001	-2.38181e-004	4.22464e-008	1.81167e-018	1.00000e+000	-0.01021
n-Octyl-BZ	6.27434e-001	-2.56319e-004	4.52225e-008	1.01024e-018	1.00000e+000	-0.00998
n-Nonyl-BZ	6.74905e-001	-2.74444e-004	4.81956e-008	1.59401e-018	1.00000e+000	-0.00755
n-Decyl-BZ	7.22417e-001	-2.92582e-004	5.11713e-008	2.40758e-018	1.00000e+000	-0.00417
n-Undecyl-BZ	7.69896e-001	-3.10706e-004	5.41448e-008	2.91627e-018	1.00000e+000	-0.00249
n-Dodecyl-BZ	8.17406e-001	-3.28844e-004	5.71204e-008	2.15920e-018	1.00000e+000	0.00250
n-TridecylBZ	8.64918e-001	-3.46979e-004	6.00962e-008	2.65182e-018	1.00000e+000	0.00997
n-TtrdecylBZ	9.12396e-001	-3.65106e-004	6.30696e-008	3.94595e-018	1.00000e+000	0.01328
n-Pentdec-BZ	9.59906e-001	-3.83243e-004	6.60454e-008	1.13764e-018	1.00000e+000	0.01723
n-HexdecylBZ	1.00738e+000	-4.01367e-004	6.90185e-008	4.77209e-018	1.00000e+000	0.02551
13-iP-BZ	6.20695e-001	-3.36428e-004	1.10231e-007	-1.62479e-011	1.00000e+000	-0.02571
14-iP-BZ	6.20695e-001	-3.36428e-004	1.10231e-007	-1.62479e-011	1.00000e+000	-0.11821
Ethynyl-BZ	3.29437e-001	-1.78945e-004	4.30880e-008	-3.11734e-020	1.00000e+000	0.05659
cis-C3=BZ	3.46432e-001	-1.50929e-004	2.95146e-008	1.50806e-019	1.00000e+000	0.09638
trans-C3=BZ	3.61539e-001	-1.64332e-004	3.34871e-008	5.43993e-020	1.00000e+000	0.09212
12-E-BZ	2.74480e-001	-9.55739e-006	-5.45223e-008	1.66983e-011	1.00000e+000	-0.02709
13-E-BZ	4.31100e-001	-1.82883e-004	3.42720e-008	8.21587e-020	1.00000e+000	0.02781
14-DiethylBZ	2.67840e-001	6.84656e-006	-6.56195e-008	1.92333e-011	1.00000e+000	0.16926
124-E-BZ	4.81629e-001	-1.82677e-004	2.90201e-008	7.03696e-020	1.00000e+000	-0.09704
135-E-BZ	5.00560e-001	-1.97111e-004	3.32678e-008	1.59189e-019	1.00000e+000	0.57423
1234-E-BZ	5.99300e-001	-2.51831e-004	4.75442e-008	2.92573e-019	1.00000e+000	-0.15273
1245-E-BZ	5.23649e-001	-1.78559e-004	2.27718e-008	1.52909e-019	1.00000e+000	-0.14779
Penta-M-BZ	4.37938e-001	-1.79423e-004	3.31745e-008	1.71284e-019	1.00000e+000	-0.13979
Penta-E-BZ	7.28996e-001	-3.24454e-004	6.58217e-008	1.26024e-019	1.00000e+000	-0.15100
ci1-PH-1-C3=	3.42092e-001	-8.68836e-005	-6.80622e-021	1.30667e-024	1.00000e+000	0.07176
tr1-PH-1-C3=	3.42009e-001	-8.68245e-005	4.39899e-021	-8.94977e-025	1.00000e+000	0.06614
1-M-Naphthln	3.34365e-001	-8.48194e-005	-1.75476e-008	9.89536e-012	1.00000e+000	-0.01795
2-M-Naphthln	3.15682e-001	-6.78188e-005	-2.46182e-008	1.10399e-011	1.00000e+000	0.38528
BiPhenyl	4.30631e-001	-9.93183e-005	3.18899e-022	1.55712e-025	1.00000e+000	-0.03338
1BNaphthalen	5.95851e-001	-2.79555e-004	5.92733e-008	-5.95438e-025	1.00000e+000	-0.02412
Naphthalene	4.24945e-001	-2.16856e-004	4.95153e-008	-1.61777e-025	1.00000e+000	0.01397
1PNaphthalen	5.08004e-001	-1.18736e-004	2.11241e-022	-3.43817e-026	1.00000e+000	-0.05739
c-Decalin	5.52847e-001	-2.14318e-004	3.39371e-008	1.59081e-019	1.00000e+000	-0.03350
t-Decalin	5.21997e-001	-1.82507e-004	2.24636e-008	1.80860e-019	1.00000e+000	0.10303
12MNaphthaln	5.09646e-001	-2.44189e-004	5.17716e-008	1.27132e-019	1.00000e+000	-0.28415
13MNaphthaln	4.91195e-001	-2.29224e-004	4.74791e-008	5.33572e-020	1.00000e+000	-0.28076
14MNaphthaln	5.09646e-001	-2.44189e-004	5.17716e-008	1.27132e-019	1.00000e+000	-0.28807
16MNaphthlen	4.91195e-001	-2.29224e-004	4.74791e-008	5.33572e-020	1.00000e+000	-0.27358
17MNaphthlen	4.91195e-001	-2.29224e-004	4.74791e-008	5.33572e-020	1.00000e+000	-0.27232
23MNaphthlen	4.42917e-001	-1.87748e-004	3.48392e-008	1.29927e-019	1.00000e+000	-0.29092
1ENaphthalen	5.19494e-001	-2.53783e-004	5.50917e-008	1.74564e-019	1.00000e+000	-0.26509

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
m-Cymene	-0.30375	HC	
p-Cymene	-0.32554	HC	
1234-M-BZ	-0.36432	HC	
1235-M-BZ	-0.66424	HC	
1245-M-BZ	-0.42012	HC	
135-iP-BZ	0.45710	HC	
n-Pentyl-BZ	-0.36015	HC	
n-Hexyl-BZ	-0.42748	HC	
n-Heptyl-BZ	-0.42748	HC	
n-Octyl-BZ	-0.45708	HC	
n-Nonyl-BZ	-0.49255	HC	
n-Decyl-BZ	-0.52095	HC	
n-Undecyl-BZ	-0.54572	HC	
n-Dodecyl-BZ	-0.57406	HC	
n-TridecylBZ	-0.60425	HC	
n-TtrdecylBZ	-0.62255	HC	
n-Pentdec-BZ	-0.64072	HC	
n-HexdecylBZ	-0.66193	HC	
13-iP-BZ	-0.43816	HC	-6770000
14-iP-BZ	-0.28648	HC	
Ethynyl-BZ	-0.10519	HC	
cis-C3=BZ	-0.12370	HC	
trans-C3=BZ	-0.12905	HC	
12-E-BZ	-0.44295	HC	-5559300
13-E-BZ	-0.25613	HC	-5554300
14-DiethylBZ	-0.22440	HC	-163880
124-E-BZ	-0.53056	HC	
135-E-BZ	0.54085	HC	
1234-E-BZ	-0.69941	HC	
1245-E-BZ	-0.69094	HC	
Penta-M-BZ	-0.55684	HC	
Penta-E-BZ	-0.78508	HC	
ci1-PH-1-C3=	-0.11806	HC	
tr1-PH-1-C3=	-0.15455	HC	
1-M-Naphtln	-0.45503	HC	
2-M-Naphtln	0.04731	HC	
BiPhenyl	-0.25630	HC	
1BNaphthalen	-0.46930	HC	
Naphthalene	-0.19302	HC	-4980900
1PNaphthalen	-0.50440	HC	-163880
c-Decalin	-0.29280	HC	
t-Decalin	-0.21308	HC	
12MNaphtaln	-0.70289	HC	
13MNaphtaln	-0.69891	HC	
14MNaphtaln	-0.70853	HC	
16MNaphtlen	-0.69059	HC	
17MNaphtlen	-0.68723	HC	
23MNaphtlen	-0.71510	HC	
1ENaphthalen	-0.63991	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
2ENaphthalen	491	156.229	774.90	31.30000	0.52150	0.51663	0.39200
2BNaphthalen	492	184.279	770.00	25.00000	0.63350	0.65229	0.53300
1234THyNapht	493	132.205	720.15	36.20000	0.44100	0.43184	0.32770
o-MStyrene	494	118.179	679.26	36.47300	0.37544	0.39776	0.25027
AMS	495	118.178	654.00	33.60000	0.42300	0.40301	0.32730
123MIndene	496	158.240	727.00	31.50000	0.49900	0.51850	0.48340
c-Stilbene	497	180.248	757.00	27.30000	0.58400	0.59330	0.47080
t-Stilbene	498	180.248	820.00	27.30000	0.57800	0.54387	0.48950
Chrysene	499	228.292	979.00	23.80000	0.72500	0.65463	0.60400
m-MStyrene	500	118.179	674.82	35.57600	0.38062	0.39956	0.28022
p-MStyrene	501	118.179	675.93	35.43900	0.38062	0.39583	0.28251
D-Limonene	502	136.205	650.00	27.50000	0.52400	0.49868	0.31230
A-Pinene	503	136.235	632.00	27.60000	0.50400	0.47998	0.28620
B-Pinene	504	136.235	642.00	27.60000	0.50600	0.48230	0.32520
Terpinolene	505	136.235	672.00	27.60000	0.50900	0.48892	0.30060
Anthracene	506	178.233	872.00	29.00000	0.55400	0.56505	0.48920
Phenanthrene	507	178.233	869.25	29.00000	0.55400	0.55283	0.49490
Acenaphthene	508	154.210	803.15	31.00000	0.55300	0.52820	0.38110
Fluoranthene	509	202.255	905.00	26.10000	0.65500	0.72485	0.58750
Pyrene	510	202.255	936.00	26.10000	0.63000	0.72346	0.50880
o-Terphenyl	511	230.309	890.95	39.01000	0.75264	0.73844	0.46710
m-Terphenyl	512	230.309	1197.00	35.05800	0.76770	0.78201	0.55830
p-Terphenyl	513	230.309	925.95	33.23500	0.76261	0.74300	0.52810
Indene	514	116.163	687.00	38.20000	0.36800	0.41828	0.33520
Indane	515	118.178	659.56	35.51500	0.41350	0.41354	0.42874
1MIndene	516	130.188	702.00	34.60000	0.44000	0.33197	0.33570
2MIndene	517	130.188	684.00	34.60000	0.42900	0.37270	0.32770
DiPhenylC1	518	168.229	766.39	30.41700	0.51923	0.56736	0.48797
DiPhenylC2	519	182.270	773.60	24.81600	0.63159	0.65358	0.54192
DiPhenylC3	520	196.291	798.56	26.25700	0.61598	0.67462	0.54298
c-PhenylC3=	521	118.180	656.55	36.03300	0.38916	0.40990	0.37722
t-PhenylC3=	522	118.180	660.91	34.67400	0.40531	0.41527	0.39057
1PhNaphthIn	523	204.270	861.42	28.84300	0.61502	0.64456	0.49020
2PhNaphthIn	524	204.270	870.31	27.74800	0.64097	0.65050	0.51443
11DiPhnylC2=	525	180.240	782.61	30.39600	0.52892	0.59900	0.49793
M-Acetylene	526	40.065	402.39	56.27600	0.16400	0.17325	0.21610
VnylAcetlen	527	52.076	452.00	48.60000	0.21796	0.19966	0.11817
DMAcetylene	528	54.092	473.20	48.70000	0.22100	0.21141	0.23854
EAcetylene	529	54.092	443.20	49.50000	0.22200	0.25650	0.24690
Biacetylene	530	50.060	477.00	58.60000	0.18350	0.18602	0.10000
3-M-1-Butyne	531	68.120	476.00	42.10000	0.27150	0.30576	0.17600
1-Pentyne	532	68.120	493.50	40.50000	0.27800	0.26670	0.16400
2-Pentyne	533	68.120	522.00	42.30000	0.27750	0.26618	0.18600
1-Hexyne	534	82.150	527.00	36.70000	0.33350	0.32544	0.24900
1-Heptyne	535	96.170	559.70	32.00000	0.38950	0.38382	0.29300
1-Octyne	536	110.196	586.90	29.60000	0.44550	0.44395	0.33800
1-Nonyne	537	124.230	610.80	26.60000	0.50150	0.50542	0.38200
1-Decyne	538	138.240	632.50	24.30000	0.55750	0.56855	0.42600
1-Undecyne	539	152.279	650.00	22.10000	0.61350	0.63316	0.47000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
2ENaphthalen	0.39200	531.50	995.24	9.90	-3.56915e-006	-5.61026e+001
2BNaphthalen	0.53300	562.20	970.22	10.35	-9.36683e-006	-5.24664e+001
1234THyNapht	0.32770	480.77	973.88	9.79	1.45724e-006	-5.36892e+001
o-MStyrene	0.25027	442.99	912.93	10.16	3.06533e+004	-6.07674e+001
AMS	0.32730	438.65	900.00	10.27	0.00000e+000	-3.52507e+001
123MIndene	0.48340	507.00	1015.65	9.55	-2.18829e-004	-8.36868e+001
c-Stilbene	0.47080	535.00	1017.53	9.71	3.46741e-005	-9.80396e+001
t-Stilbene	0.48950	579.65	1135.03	8.94	2.58676e-005	-6.88535e+001
Chrysene	0.60400	714.15	1277.29	8.51	3.15166e-006	-4.57947e+001
m-MStyrene	0.28022	444.76	914.61	10.15	3.04038e+004	-6.02358e+001
p-MStyrene	0.28251	445.93	924.18	10.06	3.14652e+004	-6.41948e+001
D-Limonene	0.31230	449.65	847.37	11.00	2.14825e-005	-7.59809e+001
A-Pinene	0.28620	429.29	864.31	10.62	1.29074e-004	-7.59952e+002
B-Pinene	0.32520	439.19	873.16	10.59	2.80494e-005	-1.41870e+002
Terpinolene	0.30060	458.15	865.52	10.84	2.56695e-005	-6.02999e+001
Anthracene	0.48920	615.18	1093.20	9.46	-8.18794e-007	-7.02833e+001
Phenanthrene	0.49490	613.45	1118.41	9.24	4.13589e+004	-1.50592e+002
Acenaphthene	0.76949	550.54	1084.99	9.19	-3.69942e-006	-6.26899e+001
Fluoranthene	1.03588	655.95	1164.84	9.07	3.25661e-005	-1.13365e+002
Pyrene	1.24999	667.95	1274.04	8.35	1.89356e-006	2.27790e+001
o-Terphenyl	0.46710	607.00	1077.82	9.56	2.40440e-006	-1.61104e+002
m-Terphenyl	0.55830	650.00	1088.93	9.68	2.40440e-006	-1.61104e+002
p-Terphenyl	0.52810	649.15	1098.53	9.59	2.40440e-006	-1.61104e+002
Indene	0.79778	455.77	1002.63	9.34	8.00622e-008	-3.32784e+001
Indane	0.21199	451.15	862.89	10.81	-1.54196e-004	-6.57169e+001
1MIndene	-0.65649	471.65	975.72	9.70	2.17436e-005	-4.79650e+001
2MIndene	-0.09946	457.00	980.50	9.56	2.09785e-005	-4.94134e+001
DiPhenylC1	0.48797	537.65	1000.79	9.88	4.00925e+004	-1.02360e+002
DiPhenylC2	0.54192	558.15	958.30	10.45	3.34328e+004	-7.56264e+001
DiPhenylC3	0.54298	573.45	1006.99	10.04	4.10091e+004	-1.09214e+002
c-PhenylC3=	0.37722	442.85	908.80	10.20	3.00426e+004	-5.81646e+001
t-PhenylC3=	0.39057	448.75	901.90	10.33	2.82913e+004	-5.32470e+001
1PhNaphthln	0.49020	607.15	1096.00	9.40	4.67978e+004	-1.60646e+002
2PhNaphthln	0.51443	618.15	1096.00	9.46	4.48736e+004	-1.56442e+002
11DiPhnlyC2=	0.49793	550.15	1023.20	9.74	4.36305e+004	-1.18888e+002
M-Acetylene	0.21610	249.94	620.54	12.35	-3.93653e-007	1.47098e+001
VnylAcetlen	0.13346	278.25	688.43	11.54	1.09812e-006	6.75676e+000
DMAcetylene	0.23854	300.13	695.84	11.70	0.00000e+000	4.38362e+001
EAcetylene	0.09860	281.22	659.29	12.09	6.42713e-007	1.25498e+001
Biacetylene	0.10000	283.50	717.26	11.14	4.42319e-008	2.43669e+001
3-M-1-Butyne	0.17600	299.50	598.74	13.59	-1.35183e-006	4.64999e+000
1-Pentyne	0.16400	313.30	694.89	11.89	6.54570e-007	1.80694e+001
2-Pentyne	0.18600	329.20	715.27	11.74	-3.78997e-006	1.21959e+001
1-Hexyne	0.24900	344.50	719.96	11.84	4.14881e-006	1.18009e+001
1-Heptyne	0.29300	372.90	736.85	11.88	-3.69412e-006	1.06057e+001
1-Octyne	0.33800	399.40	749.84	11.95	-2.43465e-006	9.67653e+000
1-Nonyne	0.38200	423.00	760.31	12.01	-5.01213e-006	7.73500e+000
1-Decyne	0.42600	447.20	768.82	12.10	-9.91961e-006	6.67799e+000
1-Undecyne	0.47000	468.20	775.98	12.17	-3.56624e-006	5.86495e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
2ENaphthalen	5.01097e-001	-2.38835e-004	5.08041e-008	8.23006e-020	1.00000e+000	-0.26862
2BNaphthalen	5.83247e-001	-2.61625e-004	5.16615e-008	2.22014e-019	1.00000e+000	-0.29528
1234THyNapht	4.22950e-001	-1.73239e-004	3.17863e-008	-8.23842e-013	1.00000e+000	0.10708
o-MStyrene	3.42164e-001	-8.69426e-005	-2.41945e-021	7.39848e-025	1.00000e+000	-0.13149
AMS	3.61659e-001	-1.51386e-004	2.60112e-008	3.96272e-013	1.00000e+000	-0.17035
123MIndene	6.18669e-001	-3.66514e-004	9.99727e-008	2.68468e-018	1.00000e+000	0.51450
c-Stilbene	6.27353e-001	-3.66111e-004	1.27264e-007	-1.93891e-011	1.00000e+000	0.48280
t-Stilbene	5.58621e-001	-2.79156e-004	7.54080e-008	-8.42070e-012	1.00000e+000	0.50185
Chrysene	5.70050e-001	-2.00323e-004	7.67995e-009	8.92476e-012	1.00000e+000	-0.31896
m-MStyrene	3.42164e-001	-8.69426e-005	8.43140e-022	-6.38417e-025	1.00000e+000	-0.11844
p-MStyrene	3.42424e-001	-8.71778e-005	-4.41121e-021	1.20524e-024	1.00000e+000	-0.10332
D-Limonene	5.66142e-001	-3.15730e-004	1.07014e-007	-1.62089e-011	1.00000e+000	0.33311
A-Pinene	2.09918e+000	-1.95822e-003	9.54907e-007	-1.85184e-010	1.00000e+000	0.27012
B-Pinene	6.54759e-001	-3.46053e-004	1.03543e-007	-1.33324e-011	1.00000e+000	0.09917
Terpinolene	5.28659e-001	-2.78810e-004	9.03001e-008	-1.33557e-011	1.00000e+000	0.52697
Anthracene	5.44896e-001	-2.77496e-004	7.61206e-008	-8.37831e-012	1.00000e+000	0.45541
Phenanthrene	5.22962e-001	-1.37310e-004	3.74106e-021	4.13930e-025	1.00000e+000	-1.11426
Acenaphthene	4.86203e-001	-2.45404e-004	6.83739e-008	-7.94831e-012	1.00000e+000	-0.35957
Fluoranthene	7.25881e-001	-4.54726e-004	1.61364e-007	-2.45489e-011	1.00000e+000	0.14372
Pyrene	3.06695e-001	6.84245e-005	-1.35172e-007	3.85971e-011	1.00000e+000	-0.15067
o-Terphenyl	9.12834e-001	-6.02919e-004	2.28505e-007	-3.64280e-011	1.00000e+000	-0.09054
m-Terphenyl	9.12834e-001	-6.02919e-004	2.28505e-007	-3.64280e-011	1.00000e+000	-0.34365
p-Terphenyl	9.12834e-001	-6.02919e-004	2.28505e-007	-3.64280e-011	1.00000e+000	0.13541
Indene	3.18631e-001	-1.25461e-004	1.94304e-008	5.08761e-013	1.00000e+000	0.09242
Indane	4.63299e-001	-2.81585e-004	7.84246e-008	1.89164e-018	1.00000e+000	-0.00202
1MIndene	4.67178e-001	-2.77247e-004	9.66714e-008	-1.48368e-011	1.00000e+000	0.05029
2MIndene	4.66822e-001	-2.76596e-004	9.66621e-008	-1.48224e-011	1.00000e+000	0.15590
DiPhenylC1	4.90124e-001	-1.26489e-004	-2.88748e-021	1.38442e-024	1.00000e+000	-0.27282
DiPhenylC2	5.29440e-001	-1.35624e-004	-1.94117e-021	-4.04901e-025	1.00000e+000	-0.28503
DiPhenylC3	5.72119e-001	-1.47801e-004	-4.56660e-021	1.47661e-024	1.00000e+000	-0.34380
c-PhenylC3=	3.41954e-001	-8.67531e-005	-1.05088e-021	1.61097e-025	1.00000e+000	0.10190
t-PhenylC3=	3.41758e-001	-8.65779e-005	-5.22996e-021	8.11453e-025	1.00000e+000	0.09140
1PhNaphthIn	5.98623e-001	-1.56711e-004	-6.54752e-021	2.35136e-024	1.00000e+000	-0.50201
2PhNaphthIn	5.98623e-001	-1.56711e-004	-4.03412e-021	5.77528e-025	1.00000e+000	-0.51963
11DiPhenylC2=	5.25895e-001	-1.36215e-004	7.82728e-022	4.27690e-025	1.00000e+000	-0.31258
M-Acetylene	9.31991e-002	-3.91331e-005	8.05984e-009	2.25009e-021	1.00000e+000	0.15252
VnylAcetlen	1.42050e-001	-7.54998e-005	1.86523e-008	-5.78713e-021	1.00000e+000	0.07695
DMAcetylene	3.74811e-002	7.26968e-005	-6.23091e-008	1.54259e-011	1.00000e+000	0.00670
EAcetylene	1.37200e-001	-5.14998e-005	8.62478e-009	-3.71692e-021	1.00000e+000	-0.22653
Biacetylene	1.12625e-001	-7.53633e-005	2.19941e-008	-1.18403e-021	1.00000e+000	0.03761
3-M-1-Butyne	2.03880e-001	-8.77263e-005	1.75130e-008	3.20144e-020	1.00000e+000	0.05178
1-Pentyne	1.75552e-001	-6.37673e-005	1.02448e-008	-1.39658e-020	1.00000e+000	0.07456
2-Pentyne	1.67229e-001	-5.23098e-005	6.32648e-009	8.96509e-020	1.00000e+000	0.09270
1-Hexyne	2.32609e-001	-9.00364e-005	1.57984e-008	-9.72277e-020	1.00000e+000	0.04794
1-Heptyne	2.80848e-001	-1.09086e-004	1.91591e-008	8.70700e-020	1.00000e+000	0.04620
1-Octyne	3.28157e-001	-1.26781e-004	2.18758e-008	5.47674e-020	1.00000e+000	0.02886
1-Nonyne	3.78734e-001	-1.48756e-004	2.65046e-008	1.20447e-019	1.00000e+000	0.02084
1-Decyne	4.26494e-001	-1.67038e-004	2.94695e-008	2.32443e-019	1.00000e+000	-0.00424
1-Undecyne	4.73519e-001	-1.84442e-004	3.20867e-008	8.40808e-020	1.00000e+000	-0.04913

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
2ENaphthalen	-0.64714	HC	
2BNaphthalen	-0.84890	HC	
1234THyNapht	-0.32190	HC	-5357500
o-MStyrene	-0.32618	HC	
AMS	-0.37343	HC	-4817800
123MIndene	0.17290	HC	-6470000
c-Stilbene	0.51955	HC	-7196800
t-Stilbene	0.56171	HC	-7200000
Chrysene	-0.72468	HC	-8679380
m-MStyrene	-0.32602	HC	
p-MStyrene	-0.30801	HC	
D-Limonene	0.73059	HC	-5815300
A-Pinene	-0.24419	HC	-5850000
B-Pinene	-0.46443	HC	-5860000
Terpinolene	0.39212	HC	
Anthracene	0.03286	HC	-6847300
Phenanthrene	-0.85107	HC	-6834300
Acenaphthene	-0.78581	HC	-6001400
Fluoranthene	-0.34185	HC	-7695000
Pyrene	-0.60746	HC	-7620000
o-Terphenyl	-0.61114	HC	-9050000
m-Terphenyl	-0.46870	HC	-9050000
p-Terphenyl	-0.28264	HC	-9052500
Indene	-0.35265	HC	-4619500
Indane	-0.37163	HC	
1MIndene	-0.19363	HC	-5210000
2MIndene	-0.05453	HC	-5260000
DiPhenylC1	-0.71163	HC	
DiPhenylC2	-0.80807	HC	
DiPhenylC3	-0.87753	HC	
c-PhenylC3=	-0.13330	HC	
t-PhenylC3=	-0.15454	HC	
1PhNaphthIn	-1.01515	HC	
2PhNaphthIn	-1.06029	HC	
11DiPhnlyC2=	-0.77074	HC	-7250000
M-Acetylene	0.06508	HC	
VnylAcetlen	-0.21708	HC	
DMAcetylene	-0.09612	HC	-2418890
EAcetylene	0.04388	HC	-2466810
Biacetylene	-0.09104	HC	
3-M-1-Butyne	0.41304	HC	
1-Pentyne	-0.16708	HC	
2-Pentyne	-0.18759	HC	
1-Hexyne	-0.14977	HC	
1-Heptyne	-0.18029	HC	
1-Octyne	-0.23244	HC	
1-Nonyne	-0.27867	HC	
1-Decyne	-0.35117	HC	
1-Undecyne	-0.45664	HC	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
1-Tridecyne	540	180.330	684.10	18.60000	0.72550	0.77809	0.55300
1-Pentadecyn	541	208.389	711.40	15.90000	0.83750	0.90539	0.62800
1-Hexadecyne	542	222.410	724.30	14.50000	0.89350	0.97589	0.66100
1-Octadecyne	543	250.470	747.30	12.80000	1.00496	1.11772	0.71500
1-Nonadecyn	544	264.489	758.90	11.90000	1.06149	1.18787	0.73500
1-Eicosyne	545	278.520	769.80	11.20000	1.11749	1.28884	0.75000
C3=Carbonate	546	102.083	778.25	54.03700	0.25145	0.29962	0.63252
2M1Buten3yne	547	66.103	492.00	43.80000	0.24800	0.25172	0.13704
1Pentene3yne	548	66.103	520.00	44.00000	0.25600	0.25135	0.25231
1Pentene4yne	549	66.103	503.00	44.00000	0.25600	0.24770	0.17864
13CC6==	550	80.130	558.00	47.30000	0.27700	0.27343	0.23084
14CC6==	551	80.130	569.00	47.30000	0.27700	0.26947	0.20483
MCC5==	552	80.130	541.00	44.30000	0.27900	0.28213	0.23756
CC6=	553	82.145	560.40	43.50000	0.29100	0.29071	0.21425
14C6==	554	82.145	510.00	33.50000	0.33100	0.33052	0.27995
cstrns24C6==	555	82.145	538.00	33.50000	0.33100	0.32617	0.27537
trstrs24C6==	556	82.145	535.00	33.50000	0.33100	0.33001	0.28211
2Norbornene	557	94.156	583.00	39.30000	0.33700	0.33342	0.15900
CC7=	558	96.172	598.00	40.10000	0.33600	0.34383	0.25171
cis2C7=	559	98.188	549.00	28.40000	0.42400	0.40341	0.29415
trans2C7=	560	98.188	543.00	28.50000	0.40600	0.40984	0.33717
cis3C7=	561	98.188	545.00	28.40000	0.42100	0.40508	0.29491
trans3C7=	562	98.188	540.00	28.50000	0.40600	0.41053	0.33406
2M1C6=	563	98.188	538.00	28.70000	0.39800	0.40462	0.30937
3M1C6=	564	98.188	528.00	29.50000	0.39800	0.40821	0.30573
4M1C6=	565	98.188	534.00	30.40000	0.39800	0.40541	0.30241
15CC8==	566	108.180	645.00	39.00000	0.36600	0.37339	0.28581
VinylCC6=	567	108.180	599.00	34.30000	0.37900	0.39322	0.32936
CC8=	568	110.195	632.00	36.80000	0.38100	0.39388	0.28043
23M1C6=	569	112.211	561.00	27.60000	0.44500	0.45917	0.32514
nBCC5	570	126.238	621.00	27.20000	0.48300	0.49622	0.37188
iPCC6	571	126.238	627.00	28.50000	0.46400	0.48155	0.32951
mDiVinylBZ	572	130.188	692.00	31.20000	0.44000	0.44523	0.37336
2PHButene1	573	132.205	666.00	30.10000	0.45400	0.46450	0.35321
cis2PHC4=2	574	132.205	685.00	30.10000	0.47000	0.45197	0.35639
trn2PHC4=2	575	132.205	654.00	30.10000	0.46400	0.46074	0.36102
mDiEBenzene	576	134.220	663.00	28.80000	0.48800	0.48582	0.35402
2EmXylene	577	134.220	671.00	30.20000	0.48200	0.47977	0.40660
2EpXylene	578	134.220	663.00	28.80000	0.48200	0.48610	0.41142
3EoXylene	579	134.220	680.00	28.80000	0.50700	0.47462	0.36211
4EmXylene	580	134.220	665.00	28.80000	0.48200	0.48729	0.41396
4EoXylene	581	134.220	667.00	28.80000	0.49000	0.48842	0.41136
5EmXylene	582	134.220	655.00	27.50000	0.48200	0.49218	0.41694
1M2nPropylBZ	583	134.220	662.00	29.40000	0.48200	0.48727	0.40701
1M3nPropylBZ	584	134.220	654.00	28.10000	0.48200	0.49328	0.41278
1M4nPropylBZ	585	134.220	656.00	28.10000	0.48200	0.49501	0.41344
Camphene	586	136.235	638.00	27.50000	0.49900	0.47516	0.29574
aPhellandren	587	136.235	649.00	28.20000	0.50000	0.50373	0.38046
bPhellandren	588	136.235	648.00	28.20000	0.48700	0.50631	0.37421

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
1-Tridecyne	0.55300	507.20	775.81	12.50	-1.65744e-005	3.53099e+000
1-Pentadecyn	0.62800	541.20	795.59	12.46	-1.70598e-005	2.45997e-001
1-Hexadecyne	0.66100	557.20	799.22	12.52	-6.90670e-006	-5.77999e-001
1-Octadecyne	0.71500	586.20	805.11	12.65	-4.48574e-006	-3.53000e+000
1-Nonadecyn	0.73500	600.20	807.95	12.70	-2.49489e-005	-4.36095e+000
1-Eicosyne	0.75000	613.20	796.25	12.98	-7.77592e-006	-5.14660e+000
C3=Carbonate	0.63252	515.05	1204.68	8.09	-4.38609e-001	1.84194e+002
2M1Buten3yne	0.13704	305.40	709.03	11.55	0.00000e+000	1.19402e+001
1Pentene3yne	0.25231	332.40	745.68	11.30	0.00000e+000	8.36667e+000
1Pentene4yne	0.17864	315.65	734.05	11.28	0.00000e+000	1.02387e+001
13CC6==	0.23084	353.49	847.36	10.15	0.00000e+000	1.14669e+001
14CC6==	0.20483	360.15	859.69	10.07	0.00000e+000	-2.13768e+001
MCC5==	0.23756	345.93	814.09	10.49	0.00000e+000	-6.28080e+001
CC6=	0.21425	356.12	814.85	10.58	0.00000e+000	1.30052e+001
14C6==	0.27995	338.15	704.37	12.03	0.00000e+000	-1.46534e+000
cstrns24C6==	0.27537	356.65	727.28	11.86	0.00000e+000	-2.39178e+001
trstrs24C6==	0.28211	355.05	718.60	11.99	0.00000e+000	-1.61932e+001
2Norbornene	0.15900	368.65	787.06	11.08	0.00000e+000	-7.36892e+001
CC7=	0.25171	387.50	830.80	10.68	0.00000e+000	-2.83849e+001
cis2C7=	0.29415	371.56	711.17	12.30	0.00000e+000	3.77917e+001
trans2C7=	0.33717	371.10	705.01	12.40	0.00000e+000	2.40794e+001
cis3C7=	0.29491	368.90	706.62	12.35	0.00000e+000	-2.48693e+001
trans3C7=	0.33406	368.82	701.89	12.43	0.00000e+000	1.84570e+000
2M1C6=	0.30937	364.99	706.77	12.30	0.00000e+000	1.81853e+001
3M1C6=	0.30573	357.05	695.18	12.41	0.00000e+000	8.60736e+000
4M1C6=	0.30241	359.88	702.29	12.32	0.00000e+000	-2.29136e+001
15CC8==	0.28581	423.27	886.80	10.30	0.00000e+000	6.32663e+000
VinylCC6=	0.32936	401.00	834.26	10.75	0.00000e+000	-8.83598e+001
CC8=	0.28043	416.15	850.65	10.68	0.00000e+000	-3.77401e+001
23M1C6=	0.32514	383.65	725.05	12.19	0.00000e+000	-9.84466e+000
nBCC5	0.37188	429.75	788.51	11.64	0.00000e+000	-2.95458e+001
iPCC6	0.32951	427.91	805.58	11.38	0.00000e+000	-7.12234e+001
mDiVinylBZ	0.37336	472.65	933.00	10.16	0.00000e+000	-3.80072e+001
2PHButene1	0.35321	455.15	894.53	10.46	0.00000e+000	-5.65044e+001
cis2PHC4=2	0.35639	467.85	926.67	10.19	0.00000e+000	-5.04016e+001
trn2PHC4=2	0.36102	447.15	899.48	10.34	0.00000e+000	-4.25029e+001
mDiEBenzene	0.35402	454.29	867.49	10.78	0.00000e+000	3.05826e+001
2EmXylene	0.40660	463.19	893.93	10.53	0.00000e+000	-3.51807e+001
2EpXylene	0.41142	459.98	880.72	10.66	0.00000e+000	-3.33515e+001
3EoXylene	0.36211	467.11	895.67	10.54	0.00000e+000	-4.11320e+001
4EmXylene	0.41396	461.59	879.87	10.69	0.00000e+000	-3.33515e+001
4EoXylene	0.41136	462.93	877.91	10.72	0.00000e+000	-3.33515e+001
5EmXylene	0.41694	456.93	868.34	10.79	0.00000e+000	-2.35566e+001
1M2nPropylBZ	0.40701	457.95	877.18	10.69	0.00000e+000	-3.13699e+001
1M3nPropylBZ	0.41278	454.95	865.05	10.82	0.00000e+000	-3.56067e+001
1M4nPropylBZ	0.41344	456.45	862.86	10.86	0.00000e+000	-3.56067e+001
Camphene	0.29574	433.65	847.62	10.86	0.00000e+000	-1.56706e+002
aPhellandren	0.38046	448.15	850.55	10.95	0.00000e+000	-1.06322e+002
bPhellandren	0.37421	447.15	844.39	11.02	0.00000e+000	-1.08372e+002

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
1-Tridecyne	5.70198e-001	-2.22937e-004	3.90294e-008	3.87182e-019	1.00000e+000	-0.07058
1-Pentadecyn	6.68943e-001	-2.63452e-004	4.66666e-008	4.09524e-019	1.00000e+000	-0.05111
1-Hexadecyne	7.16049e-001	-2.80899e-004	4.92967e-008	1.64995e-019	1.00000e+000	-0.02165
1-Octadecyne	8.14145e-001	-3.20870e-004	5.67715e-008	1.01001e-019	1.00000e+000	0.02654
1-Nonadecyn	8.61295e-001	-3.38461e-004	5.94815e-008	5.82934e-019	1.00000e+000	0.05480
1-Eicosyne	9.01806e-001	-3.53336e-004	6.16643e-008	1.79748e-019	1.00000e+000	0.10562
C3=Carbonate	-3.78269e-001	3.90732e-004	-1.54743e-010	8.83108e-014	1.00000e+000	-0.02142
2M1Buten3yne	1.71227e-001	-7.43297e-005	1.62341e-008	-1.08209e-012	1.00000e+000	0.15016
1Pentene3yne	1.72663e-001	-8.23077e-005	2.45116e-008	-3.49268e-012	1.00000e+000	-0.08541
1Pentene4yne	1.76464e-001	-9.16770e-005	3.10679e-008	-4.97950e-012	1.00000e+000	0.14234
13CC6==	1.13443e-001	1.02799e-004	-1.14131e-007	3.11808e-011	1.00000e+000	-0.06349
14CC6==	2.27895e-001	-6.47968e-005	-5.49499e-009	5.31542e-012	1.00000e+000	0.22721
MCC5==	3.67779e-001	-2.38691e-004	9.12347e-008	-1.51430e-011	1.00000e+000	-0.14942
CC6=	1.12627e-001	1.34680e-004	-1.36400e-007	3.61752e-011	1.00000e+000	-0.06493
14C6==	2.44876e-001	-1.01643e-004	2.41245e-008	-2.49020e-012	1.00000e+000	-0.02941
cstrns24C6==	2.99259e-001	-1.58589e-004	5.24560e-008	-8.16206e-012	1.00000e+000	-0.04193
trstrs24C6==	2.97498e-001	-1.65170e-004	5.86082e-008	-9.55786e-012	1.00000e+000	0.01395
2Norbornene	3.72665e-001	-1.61917e-004	3.28175e-008	-1.41814e-012	1.00000e+000	-0.13299
CC7=	2.91356e-001	-6.49903e-005	-1.88007e-008	9.32648e-012	1.00000e+000	0.36986
cis2C7=	1.72517e-001	7.48232e-005	-9.78203e-008	2.67523e-011	1.00000e+000	-0.02697
trans2C7=	2.22183e-001	1.07605e-005	-5.96955e-008	1.75643e-011	1.00000e+000	-0.00097
cis3C7=	3.37646e-001	-1.26000e-004	1.92562e-008	-1.29454e-013	1.00000e+000	-0.06805
trans3C7=	2.80099e-001	-5.87744e-005	-1.97295e-008	8.65519e-012	1.00000e+000	-0.04696
2M1C6=	2.54608e-001	-3.58802e-005	-3.04558e-008	1.06938e-011	1.00000e+000	-0.02800
3M1C6=	2.65880e-001	-3.78935e-005	-3.36773e-008	1.19670e-011	1.00000e+000	-0.05232
4M1C6=	3.56949e-001	-1.58089e-004	3.98719e-008	-4.95311e-012	1.00000e+000	-0.06185
15CC8==	1.98973e-001	1.03224e-004	-1.35519e-007	3.76788e-011	1.00000e+000	-0.29298
VinylCC6=	4.93059e-001	-2.98428e-004	1.10176e-007	-1.81100e-011	1.00000e+000	-0.20890
CC8=	3.44386e-001	-7.22440e-005	-2.77139e-008	1.27025e-011	1.00000e+000	0.32186
23M1C6=	3.54890e-001	-1.11696e-004	7.46807e-009	1.56095e-012	1.00000e+000	-0.06248
nBCC5	4.03353e-001	-1.09698e-004	-6.25754e-009	7.39968e-012	1.00000e+000	-0.02602
iPCC6	5.01913e-001	-1.98026e-004	3.55217e-008	-9.48315e-013	1.00000e+000	-0.03172
mDiVinylBZ	4.35021e-001	-2.53643e-004	8.88770e-008	-1.38521e-011	1.00000e+000	-0.29893
2PHButene1	4.87242e-001	-2.84411e-004	1.00654e-007	-1.58019e-011	1.00000e+000	-0.13338
cis2PHC4=2	4.55338e-001	-2.47381e-004	8.21297e-008	-1.23274e-011	1.00000e+000	-0.21342
trn2PHC4=2	4.52043e-001	-2.51212e-004	8.66331e-008	-1.36569e-011	1.00000e+000	-0.14632
mDiEBenzene	2.46683e-001	5.20796e-005	-1.03793e-007	3.03000e-011	1.00000e+000	-0.11712
2EmXylene	4.60448e-001	-2.37888e-004	7.51072e-008	-1.10894e-011	1.00000e+000	-0.34332
2EpXylene	4.39426e-001	-2.10727e-004	5.98738e-008	-7.74751e-012	1.00000e+000	-0.20828
3EoXylene	4.82242e-001	-2.75049e-004	1.04916e-007	-2.01471e-011	1.00000e+000	-0.36227
4EmXylene	4.39426e-001	-2.10727e-004	5.98738e-008	-7.74751e-012	1.00000e+000	-0.15894
4EoXylene	4.39426e-001	-2.10727e-004	5.98738e-008	-7.74751e-012	1.00000e+000	-0.23389
5EmXylene	3.95624e-001	-1.55646e-004	2.95719e-008	-1.42245e-012	1.00000e+000	-0.25308
1M2nPropylBZ	4.34905e-001	-1.98137e-004	4.92428e-008	-4.85122e-012	1.00000e+000	-0.31696
1M3nPropylBZ	4.29697e-001	-1.90873e-004	4.62371e-008	-4.39211e-012	1.00000e+000	-0.19260
1M4nPropylBZ	4.29697e-001	-1.90873e-004	4.62371e-008	-4.39211e-012	1.00000e+000	-0.06269
Camphene	6.74306e-001	-3.67829e-004	1.17338e-007	-1.65987e-011	1.00000e+000	0.00373
aPhellandren	6.50970e-001	-4.14300e-004	1.61404e-007	-2.78174e-011	1.00000e+000	-0.05759
bPhellandren	6.60102e-001	-4.21483e-004	1.62641e-007	-2.74950e-011	1.00000e+000	-0.04618

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
1-Tridecyne	-0.55635	HC	
1-Pentadecyn	-0.60091	HC	
1-Hexadecyne	-0.59392	HC	
1-Octadecyne	-0.57896	HC	
1-Nonadecyn	-0.56523	HC	
1-Eicosyne	-0.50271	HC	
C3=Carbonate	-0.59543	HC	
2M1Buten3yne	-0.01098	HC	-2929990
1Pentene3yne	-0.16758	HC	-2910000
1Pentene4yne	-0.00800	HC	-2929990
13CC6==	-0.36235	HC	-3399910
14CC6==	0.10783	HC	-3404000
MCC5==	-0.29462	HC	-3400000
CC6=	-0.41377	HC	-3531380
14C6==	-0.14188	HC	-3611000
cstrns24C6==	-0.09551	HC	-3488000
trstrs24C6==	-0.04030	HC	-3580000
2Norbornene	-0.46454	HC	-4019990
CC7=	-0.01016	HC	-4159000
cis2C7=	-0.21716	HC	-4342420
trans2C7=	-0.21041	HC	-4339990
cis3C7=	-0.27580	HC	-4343320
trans3C7=	-0.27144	HC	-4339990
2M1C6=	-0.21328	HC	-4335000
3M1C6=	-0.26279	HC	-4346000
4M1C6=	-0.29190	HC	-4349990
15CC8==	-0.42878	HC	-4659980
VinylCC6=	-0.24468	HC	-4626000
CC8=	-0.11602	HC	-4771990
23M1C6=	-0.21682	HC	-4947000
nBCC5	-0.36628	HC	-5503700
iPCC6	-0.40741	HC	-5480000
mDiVinylBZ	-0.43837	HC	-5300010
2PHButene1	-0.40922	HC	-5430000
cis2PHC4=2	-0.39956	HC	-5420000
trn2PHC4=2	-0.39728	HC	-5420000
mDiEBenzene	-0.40460	HC	-5554300
2EmXylene	-0.66528	HC	-5548000
2EpXylene	-0.53396	HC	-5543000
3EoXylene	-0.66156	HC	-5547300
4EmXylene	-0.44739	HC	-5544000
4EoXylene	-0.55392	HC	-5542000
5EmXylene	-0.59867	HC	-5539990
1M2nPropylBZ	-0.62283	HC	-5555400
1M3nPropylBZ	-0.52262	HC	5551600
1M4nPropylBZ	-0.36309	HC	-5552790
Camphene	-0.55536	HC	-5790000
aPhellandren	-0.27714	HC	-5810000
bPhellandren	-0.27257	HC	-5810000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
aTerpinene	589	136.235	652.00	28.00000	0.50600	0.51153	0.37549
gTerpinene	590	136.235	661.00	28.00000	0.50500	0.50437	0.37500
LMenthol	591	156.268	658.00	27.10000	0.57200	0.58290	0.77961
AcebaPhthlne	592	152.195	792.00	32.00000	0.54400	0.55601	0.39870
26DMNaphthal	593	156.227	777.00	31.70000	0.52000	0.52667	0.41768
BiCycloHexyl	594	166.307	727.00	25.60000	0.59800	0.61309	0.42756
Fluorene	595	166.222	870.00	47.00000	0.40000	0.39930	0.34926
DiPhenylC2#	596	178.233	832.00	29.00000	0.61100	0.60756	0.38359
11DiPHEthane	597	182.264	775.00	26.80000	0.60400	0.60915	0.45664
1PHIndene	598	192.259	865.00	27.60000	0.62700	0.60880	0.46903
1nHxNaphthal	599	212.335	813.00	22.50000	0.74100	0.78393	0.58738
1C61234THyNa	600	216.367	779.00	18.90000	0.77100	0.81698	0.58879
24DiPH4MC5=1	601	236.356	835.00	20.00000	0.83900	0.83322	0.54669
23MDiPHC4	602	238.373	805.00	19.90000	0.78100	0.74892	0.52078
1nC9Naphthal	603	254.414	849.00	16.80000	1.00000	0.96996	0.61678
TriPHC2=	604	256.346	908.00	21.00000	0.86000	0.85726	0.59984
112TriPHC2	605	258.363	840.00	20.40000	0.80800	0.80150	0.61161
1C10Naphthal	606	268.441	859.00	15.80000	1.07000	1.03972	0.64149
AllylAlcohol	607	58.080	542.00	56.20000	0.20000	0.21249	0.57225
Propargyl-ol	608	56.064	570.00	65.20000	0.17599	0.18716	0.55460
2-Hexanol	609	102.177	586.20	40.50000	0.38100	0.40933	0.63063
2-E-1-C4ol	610	102.177	570.00	32.00000	0.37999	0.40731	0.71362
4-M-2-C5ol	611	102.177	574.40	34.70000	0.37999	0.40141	0.57234
2-M-1-C5ol	612	102.177	582.00	32.00000	0.37999	0.40933	0.72618
1-M-CC6ol	613	114.188	602.00	37.70000	0.41400	0.41418	0.68298
ci2-M-CC6ol	614	114.188	612.00	37.70000	0.41400	0.41277	0.67873
tr2-M-CC6ol	615	114.188	616.00	37.70000	0.41400	0.41488	0.68304
ci3-M-CC6ol	616	114.188	617.00	37.70000	0.41400	0.42151	0.70420
tr3-M-CC6ol	617	114.188	617.00	37.70000	0.41398	0.41841	0.69708
ci4-M-CC6ol	618	114.188	622.00	37.70000	0.41400	0.42267	0.68537
tr4-M-CC6ol	619	114.188	622.00	37.70000	0.41400	0.42469	0.69134
1-Octanol	620	130.231	652.50	28.60000	0.49000	0.52363	0.58700
2-Octanol	621	130.231	637.00	28.60000	0.49000	0.51174	0.50563
4-M-3-C7ol	622	130.231	623.50	28.60000	0.49000	0.53731	0.52999
5-M-3-C7ol	623	130.231	621.20	28.60000	0.49000	0.54613	0.57800
2-E-1-C6ol	624	130.231	640.20	28.60000	0.49000	0.48561	0.58846
1-Nonanol	625	144.257	670.00	26.30000	0.54600	0.58516	0.59355
1-Decanol	626	158.285	687.00	22.20000	0.60000	0.64889	0.61334
i-Decanol	627	158.283	644.00	22.80000	0.59100	0.70117	0.91298
1-Undecanol	628	172.311	704.00	20.80000	0.64300	0.70125	0.58723
1-Dodecanol	629	186.339	679.00	19.10000	0.71798	0.82827	0.95420
1-Tridecanol	630	200.365	720.00	18.10000	0.74900	0.84113	0.62716
1-Ttrdecanol	631	214.391	740.00	17.00000	0.80198	0.92268	0.67654
1-Hxadecanol	632	242.445	750.00	15.00000	0.90700	1.08053	0.74800
1-Hptdecanol	633	256.471	735.00	13.00000	0.10180	1.14900	1.11846
1-Octdecanol	634	270.501	777.00	13.90000	1.00996	1.25601	1.15900
1-Eicosanol	635	298.553	770.00	11.00000	1.12099	1.42242	1.14049
DMPHCarbinol	636	136.190	701.83	36.78100	0.40435	0.45235	0.40124
12-C3diol	637	76.096	625.00	60.70000	0.23700	0.28288	1.10651

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
aTerpinene	0.37549	450.35	837.48	11.13	0.00000e+000	-5.61794e+001
gTerpinene	0.37500	456.15	852.34	10.99	0.00000e+000	-7.97671e+001
LMenthol	0.77961	489.55	879.63	10.90	0.00000e+000	-6.52422e+001
AcebaPhthaline	0.39870	543.15	854.46	11.62	0.00000e+000	-4.66084e+001
26DMNaphthal	0.41768	535.15	928.89	10.63	0.00000e+000	-5.16662e+001
BiCycloHexyl	0.42756	512.19	889.13	10.95	0.00000e+000	-1.19241e+002
Fluorene	0.34926	570.44	1296.18	7.78	0.00000e+000	-7.37864e+001
DiPhenylC2#	0.38359	573.00	945.70	10.68	0.00000e+000	-6.61400e+001
11DiPHEthane	0.45664	545.78	1003.03	9.91	0.00000e+000	-1.06188e+002
1PHIndene	0.46903	610.00	1082.89	9.53	0.00000e+000	-6.19061e+001
1nHxNaphthal	0.58738	595.15	953.49	10.73	0.00000e+000	-8.37895e+001
1C61234THyNa	0.58879	578.15	924.20	10.97	0.00000e+000	-1.27795e+002
24DiPH4MC5=1	0.54669	614.00	984.98	10.50	0.00000e+000	-1.42391e+002
23MDiPHC4	0.52078	589.00	1021.63	9.98	0.00000e+000	-1.65798e+002
1nC9Naphthal	0.61678	639.00	939.91	11.15	0.00000e+000	-7.84226e+001
TriPHC2=	0.59984	669.00	1041.75	10.21	0.00000e+000	-1.27691e+002
112TriPHC2	0.61161	622.00	1120.17	9.27	0.00000e+000	-1.50933e+002
1C10Naphthal	0.64149	652.00	934.46	11.29	0.00000e+000	-8.50472e+001
AllylAlcohol	0.57225	370.20	855.52	10.21	0.00000e+000	-1.10574e+000
Propargyl-ol	0.55460	386.75	955.18	9.28	0.00000e+000	2.12572e+001
2-Hexanol	0.63063	411.00	815.00	11.10	8.80896e-007	4.81098e+000
2-E-1-C4ol	0.71362	419.65	836.63	10.89	0.00000e+000	-7.69602e+000
4-M-2-C5ol	0.57234	404.85	813.02	11.07	0.00000e+000	-1.16052e+000
2-M-1-C5ol	0.72618	421.15	836.52	10.90	0.00000e+000	-4.35707e+000
1-M-CC6ol	0.68298	430.15	923.44	9.94	0.00000e+000	-4.17186e+001
ci2-M-CC6ol	0.67873	438.15	930.86	9.93	0.00000e+000	-4.87160e+001
tr2-M-CC6ol	0.68304	439.65	928.23	9.97	0.00000e+000	-4.87160e+001
ci3-M-CC6ol	0.70420	441.15	920.24	10.06	0.00000e+000	-4.87160e+001
tr3-M-CC6ol	0.69708	441.15	924.69	10.01	0.00000e+000	-4.87160e+001
ci4-M-CC6ol	0.68537	444.15	914.53	10.15	0.00000e+000	-4.87160e+001
tr4-M-CC6ol	0.69134	444.15	911.79	10.18	0.00000e+000	-4.87160e+001
1-Octanol	0.58700	468.30	829.96	11.38	0.00000e+000	6.17497e+000
2-Octanol	0.50563	452.00	824.23	11.33	0.00000e+000	2.58964e+001
4-M-3-C7ol	0.52999	442.00	785.44	11.80	0.00000e+000	2.51151e+001
5-M-3-C7ol	0.57800	445.00	782.40	11.87	0.00000e+000	2.51151e+001
2-E-1-C6ol	0.36504	457.80	836.76	11.20	0.00000e+000	-1.49987e+001
1-Nonanol	0.59355	486.70	830.63	11.52	0.00000e+000	1.28078e+000
1-Decanol	0.61334	506.10	831.95	11.65	0.00000e+000	1.45796e+001
i-Decanol	0.91298	492.00	827.98	11.60	0.00000e+000	-1.16800e+001
1-Undecanol	0.58723	518.15	836.91	11.67	0.00000e+000	-3.30212e+000
1-Dodecanol	1.12557	533.10	831.26	11.87	0.00000e+000	9.22991e+000
1-Tridecanol	0.62716	547.15	828.71	12.01	0.00000e+000	-5.32240e+000
1-Ttrdecanol	0.67654	560.15	823.26	12.18	0.00000e+000	-6.35241e+000
1-Hxadecanol	0.74800	585.15	818.01	12.44	0.00000e+000	5.07898e+001
1-Hptdecanol	0.79492	597.00	819.17	12.50	0.00000e+000	-7.79710e+000
1-Octdecanol	0.86343	607.00	810.96	12.70	0.00000e+000	-8.70970e+000
1-Eicosanol	0.93681	627.00	815.95	12.76	0.00000e+000	-1.25873e+001
DMPHCarbinol	0.40124	475.17	971.54	9.77	3.81079e+004	-8.79663e+001
12-C3diol	1.10651	460.50	1040.18	9.03	0.00000e+000	6.32411e-001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
aTerpinene	5.83674e-001	-3.67675e-004	1.43941e-007	-2.50641e-011	1.00000e+000	-0.05812
gTerpinene	6.39945e-001	-4.29632e-004	1.76847e-007	-3.18637e-011	1.00000e+000	-0.07725
LMenthol	5.53353e-001	-1.84245e-004	-4.90036e-010	1.20255e-011	1.00000e+000	-0.81869
AcebaPhthline	4.01206e-001	-1.57036e-004	1.73180e-008	3.72974e-012	1.00000e+000	0.21936
26DMNaphthal	5.06093e-001	-2.71783e-004	8.72328e-008	-1.25084e-011	1.00000e+000	-0.30531
BiCycloHexyl	6.70741e-001	-2.49002e-004	3.37297e-008	2.02278e-012	1.00000e+000	-0.56761
Fluorene	5.00965e-001	-2.20494e-004	3.94506e-008	6.07330e-013	1.00000e+000	-0.21318
DiPhenylC2#	5.26352e-001	-2.49963e-004	5.48772e-008	-2.82631e-012	1.00000e+000	-0.12781
11DiPHEthane	6.73943e-001	-3.92989e-004	1.35483e-007	-2.05479e-011	1.00000e+000	-0.39517
1PHIndene	5.40321e-001	-1.99703e-004	1.72186e-008	6.16584e-012	1.00000e+000	-0.17229
1nHxNaphthal	7.64102e-001	-4.11979e-004	1.30947e-007	-1.82088e-011	1.00000e+000	-0.40450
1C61234THyNa	8.81553e-001	-4.92860e-004	1.65667e-007	-2.47695e-011	1.00000e+000	-0.00802
24DiPH4MC5=1	9.52683e-001	-5.89548e-004	2.16543e-007	-3.48720e-011	1.00000e+000	-0.12658
23MDiPHC4	1.01196e+000	-6.16230e-004	2.21580e-007	-3.51359e-011	1.00000e+000	0.07047
1nC9Naphthal	8.73513e-001	-4.31527e-004	1.23893e-007	-1.57010e-011	1.00000e+000	-0.06847
TriPHC2=	8.96947e-001	-5.40993e-004	1.93089e-007	-3.02883e-011	1.00000e+000	-0.05898
112TriPHC2	9.29285e-001	-5.34889e-004	1.80814e-007	-2.68721e-011	1.00000e+000	0.04834
1C10Naphthal	9.37895e-001	-4.71584e-004	1.39435e-007	-1.83242e-011	1.00000e+000	-0.26753
AllylAlcohol	1.57404e-001	-6.77782e-005	1.33111e-008	2.93229e-026	1.00000e+000	-0.08333
Propargyl-ol	1.02387e-001	-3.71997e-005	4.76988e-009	3.03263e-013	1.00000e+000	-0.60105
2-Hexanol	2.94550e-001	-1.00333e-004	1.35645e-008	-4.63852e-021	1.00000e+000	-0.00972
2-E-1-C4ol	3.26881e-001	-1.30993e-004	2.37488e-008	2.57931e-025	1.00000e+000	-0.42480
4-M-2-C5ol	3.17890e-001	-1.22339e-004	2.04427e-008	-4.95228e-025	1.00000e+000	-0.01539
2-M-1-C5ol	3.13961e-001	-1.16867e-004	1.86741e-008	-3.19835e-025	1.00000e+000	-0.02486
1-M-CC6ol	3.81117e-001	-1.27719e-004	1.34279e-008	0.00000e+000	1.00000e+000	-0.34215
ci2-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-1.82351
tr2-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-2.17384
ci3-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-0.10260
tr3-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-0.73171
ci4-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-0.35150
tr4-M-CC6ol	3.89962e-001	-1.32898e-004	1.47015e-008	2.19071e-025	1.00000e+000	-0.28595
1-Octanol	3.80600e-001	-1.26650e-004	1.56673e-008	-1.31500e-026	1.00000e+000	-0.49849
2-Octanol	3.82302e-001	-1.40893e-004	2.26743e-008	2.49849e-025	1.00000e+000	-1.22011
4-M-3-C7ol	3.37446e-001	-1.19306e-004	5.04816e-008	2.10400e-025	1.00000e+000	-0.00885
5-M-3-C7ol	3.37446e-001	-1.19306e-004	5.04816e-008	2.10400e-025	1.00000e+000	-0.01031
2-E-1-C6ol	4.32987e-001	-1.76114e-004	3.21458e-008	-9.20498e-026	1.00000e+000	-0.33041
1-Nonanol	4.41138e-001	-1.59805e-004	2.45178e-008	-2.47626e-025	1.00000e+000	-0.63516
1-Decanol	4.47630e-001	-1.30785e-004	8.63302e-009	3.19654e-026	1.00000e+000	-0.18806
i-Decanol	5.17913e-001	-2.04728e-004	3.61590e-008	-4.31528e-025	1.00000e+000	-0.58732
1-Undecanol	5.55017e-001	-2.15585e-004	3.49845e-008	2.78383e-025	1.00000e+000	-0.44534
1-Dodecanol	5.51865e-001	-1.78048e-004	1.94598e-008	-7.52617e-026	1.00000e+000	-0.17666
1-Tridecanol	6.53685e-001	-2.56189e-004	4.18404e-008	4.24866e-025	1.00000e+000	-0.86789
1-Ttrdecanol	7.02701e-001	-2.75975e-004	4.50592e-008	-6.06143e-025	1.00000e+000	-0.87321
1-Hxadecanol	6.76402e-001	-2.13092e-004	2.24603e-008	6.85459e-025	1.00000e+000	-1.04718
1-Hptdecanol	8.27029e-001	-3.11700e-004	5.11319e-008	8.28703e-025	1.00000e+000	-0.25709
1-Octdecanol	8.74576e-001	-3.29576e-004	5.39595e-008	-5.73586e-025	1.00000e+000	-0.35914
1-Eicosanol	9.75632e-001	-3.72902e-004	6.29404e-008	2.71315e-025	1.00000e+000	-0.38457
DMPHCarbinol	3.95973e-001	-1.01678e-004	1.66164e-021	3.85047e-025	1.00000e+000	0.43203
12-C3diol	2.10740e-001	-9.94308e-005	2.23921e-008	3.84187e-026	1.00000e+000	-0.11761

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
aTerpinene	-0.27474	HC	-5800000
gTerpinene	-0.27521	HC	-5810000
LMenthol	-1.98995	HC	-5874000
Aceabaphthine	0.11556	HC	-5875900
26DMNaphthal	-0.69024	HC	-6167600
BiCycloHexyl	-1.03970	HC	-7053000
Fluorene	-0.41975	HC	-6425100
DiPhenylC2#	-0.48409	HC	-7148360
11DiPHEthane	-0.80347	HC	-7250000
1PHIndene	-0.51592	HC	-7530000
1nHxNaphthal	-0.87529	HC	-8647990
1C61234THyNa	-0.41561	HC	-9010000
24DiPH4MC5=1	-0.73620	HC	-9580000
23MDiPHC4	-0.56056	HC	-9799980
1nC9Naphthal	-0.42965	HC	-10500000
TriPHC2=	-0.60222	HC	-10000000
112TriPHC2	-0.61868	HC	-10177000
1C10Naphthal	-0.78461	HC	-11100000
AllylAlcohol	-0.76090	Alcohol	-1731920
Propargyl-ol	-1.33192	Alcohol	-1656900
2-Hexanol	-0.57524	Alcohol	
2-E-1-C4ol	-1.63820	Alcohol	-3671400
4-M-2-C5ol	-0.52230	Alcohol	-3661290
2-M-1-C5ol	-0.62796	Alcohol	-3673400
1-M-CC6ol	-1.92586	Alcohol	-4057800
ci2-M-CC6ol	-3.66861	Alcohol	-4057400
tr2-M-CC6ol	-4.28212	Alcohol	-4031790
ci3-M-CC6ol	-1.39005	Alcohol	-4031390
tr3-M-CC6ol	-2.27724	Alcohol	-4053200
ci4-M-CC6ol	-1.77663	Alcohol	-4034400
tr4-M-CC6ol	-1.77830	Alcohol	-4014300
1-Octanol	-1.45061	Alcohol	-4899460
2-Octanol	-2.38032	Alcohol	-4870000
4-M-3-C7ol	-0.50463	Alcohol	-7953010
5-M-3-C7ol	-0.54500	Alcohol	
2-E-1-C6ol	-1.31587	Alcohol	-4892080
1-Nonanol	-1.61096	Alcohol	-5500600
1-Decanol	-1.06417	Alcohol	-6117000
i-Decanol	-1.80780	Alcohol	-6110000
1-Undecanol	-1.37343	Alcohol	-6739110
1-Dodecanol	-1.13214	Alcohol	-7337000
1-Tridecanol	-1.91612	Alcohol	-7953010
1-Ttrdecanol	-1.93850	Alcohol	-8562730
1-Hxadecanol	-2.07679	Alcohol	-9797010
1-Hptdecanol	-1.73134	Alcohol	-10396500
1-Octdecanol	-1.83773	Alcohol	-10997500
1-Eicosanol	-1.88555	Alcohol	-12215800
DMPHCarbinol	0.46988	Alcohol	-4690000
12-C3diol	-1.40541	Alcohol	-1647500

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
13-C3diol	638	76.096	657.00	59.20000	0.21694	0.20574	1.16647
Glycerol	639	92.095	725.00	66.70000	0.25499	0.41190	1.50838
ci214C4=diol	640	88.106	670.00	52.00000	0.27900	0.33245	1.17358
tr214C4=diol	641	88.106	681.00	52.00000	0.27900	0.31732	1.17360
12-C4diol	642	90.150	618.30	49.73300	0.29750	0.35261	1.21796
13-C4diol	643	90.122	642.00	50.00000	0.29199	0.35271	1.14563
14-C4diol	644	90.122	667.00	48.70000	0.29699	0.36028	1.18921
23-C4diol	645	90.120	607.63	49.73300	0.29750	0.34985	1.13311
12-C5diol	646	104.150	636.31	43.62600	0.35350	0.42636	1.13584
14-C5diol	647	104.150	654.78	44.09100	0.34750	0.42183	1.17252
15-C5diol	648	104.149	672.00	41.50000	0.34498	0.42866	1.21991
124-C4triol	649	106.120	725.28	57.56600	0.31050	0.53022	1.69356
Erythritol	650	122.120	750.68	67.40700	0.32350	0.79339	2.19341
Penterytrito	651	136.147	780.00	47.80000	0.38100	0.64279	2.17276
Hydroquinone	652	110.111	822.00	74.50000	0.30000	0.40636	0.68610
123-BZtriol	653	126.111	830.00	88.00000	0.31799	0.56559	0.94458
16-C6diol	654	118.176	670.00	36.10000	0.39800	0.50097	1.26750
2-M24-C5diol	655	118.176	621.00	40.10000	0.39800	0.60895	1.19690
THyFurfurol	656	102.133	637.00	46.60000	0.28999	0.33191	0.70248
Furfurol	657	98.100	632.00	53.50000	0.26300	0.28593	0.73536
Tri-M-ol-C3	658	134.175	709.00	39.10000	0.41600	0.56926	1.54305
TtrC2=Glycol	659	194.227	722.00	25.80000	0.56400	0.56796	1.57825
Sorbitol	660	182.173	868.00	46.40000	0.48300	0.61747	2.21305
diAcetone-ol	661	116.160	606.00	36.00000	0.38699	0.42254	0.75650
Cellosolve	662	90.122	567.00	42.30000	0.29400	0.32357	0.75910
M-Cellosolve	663	76.095	562.00	50.10000	0.24200	0.26021	0.73110
B-Cellosolve	664	118.176	600.00	32.20000	0.40000	0.45470	0.81740
B-Carbitol	665	162.229	654.00	25.60000	0.52600	0.62638	0.93150
Butoxy3Glycl	666	206.279	700.67	21.89700	0.66850	0.83461	1.10801
Acetol	667	74.079	596.00	57.40000	0.22800	0.23452	0.77358
2C4#14Diol	668	86.090	695.00	58.60000	0.25600	0.30923	1.13426
2M1C3ol	669	74.123	547.78	43.00000	0.27300	0.29000	0.58482
NeoC5Glycol	670	104.149	643.00	42.40000	0.34500	0.43156	1.14311
12BZdiol	671	110.111	764.00	74.90000	0.30000	0.31160	0.69373
13BZdiol	672	110.111	810.00	74.90000	0.30000	0.30539	0.67668
HexGlycol	673	118.176	621.00	40.10000	0.39800	0.50126	1.15796
DiC3=Glycol	674	134.175	654.00	35.80000	0.41500	0.52999	1.19769
5M1C6ol	675	116.203	605.00	30.30000	0.43200	0.49134	0.78072
2PHEthanol	676	122.166	684.00	39.20000	0.38700	0.42211	0.74293
2PH2C3ol	677	136.194	660.00	34.90000	0.44000	0.45731	0.69752
2-C9ol	678	144.257	623.00	24.80000	0.53800	0.62870	0.89038
1C15ol	679	228.417	752.00	16.00000	0.85400	0.95335	0.70928
1C19ol	680	284.526	784.00	13.00000	1.07000	1.24109	0.89749
Glyoxal	681	58.037	495.00	58.70000	0.16400	0.14653	0.41328
Acrolein	682	56.064	506.00	51.60000	0.19200	0.18994	0.33000
tr-Crotonal	683	70.091	571.00	42.50000	0.25000	0.24526	0.34553
Methacrolein	684	70.091	520.00	42.50000	0.25000	0.23488	0.24560
n-Hexanal	685	100.161	577.00	31.10000	0.36899	0.37867	0.43898
SalicylAl	686	122.123	670.00	49.80000	0.34200	0.35589	0.62597

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
13-C3diol	0.01152	487.60	1060.77	9.03	0.00000e+000	8.27316e+000
Glycerol	1.98450	562.00	1260.78	7.96	0.00000e+000	8.42960e+000
ci214C4=diol	1.17358	510.00	1079.30	9.01	0.00000e+000	1.67339e+001
tr214C4=diol	1.17360	510.00	1065.40	9.12	0.00000e+000	5.16095e+000
12-C4diol	1.17227	463.65	1006.94	9.35	-8.50963e-005	9.83699e+000
13-C4diol	1.14563	480.15	1011.15	9.42	0.00000e+000	1.08532e+001
14-C4diol	1.18921	501.15	1017.46	9.50	0.00000e+000	4.86257e+000
23-C4diol	1.17227	455.65	1007.96	9.29	-8.50680e-005	9.83371e+000
12-C5diol	1.20875	483.15	984.41	9.70	-5.80820e-005	8.92511e+000
14-C5diol	1.17252	494.85	992.33	9.70	-4.46915e-005	7.24309e+000
15-C5diol	1.21991	512.15	1002.01	9.71	0.00000e+000	5.37997e+000
124-C4triol	1.69356	567.02	1021.46	9.86	-7.68234e-005	1.34428e+001
Erythritol	2.19341	603.15	1023.28	10.04	-7.51756e-005	1.70519e+001
Penterytrito	2.17276	631.00	881.31	11.84	0.00000e+000	7.66785e+000
Hydroquinone	0.68610	558.15	985.71	10.16	0.00000e+000	-2.59091e+001
123-BZtriol	0.94458	581.85	884.64	11.48	0.00000e+000	-2.64467e+001
16-C6diol	1.25000	516.15	988.19	9.87	0.00000e+000	-1.48244e+000
2-M24-C5diol	1.19690	470.65	771.99	12.26	0.00000e+000	-1.81365e+001
THyFurfurol	0.70248	451.15	1055.56	8.84	3.16810e+004	-2.59426e+001
Furfurol	0.58868	443.10	1134.86	8.17	1.32958e-005	-6.67429e+000
Tri-M-ol-C3	1.54305	562.04	1119.38	8.97	0.00000e+000	-1.53322e+001
TtrC2=Glycol	0.46260	581.00	1130.27	8.98	1.19596e+004	1.51536e+001
Sorbitol	2.21305	704.00	1404.19	7.71	0.00000e+000	-1.93921e+001
diAcetone-ol	0.75650	441.00	942.35	9.83	1.04978e+004	1.06246e+001
Cellosolve	0.75910	408.15	934.72	9.65	1.39909e-005	5.91805e-001
M-Cellosolve	0.73110	397.55	970.35	9.22	1.56168e-005	1.17578e+001
B-Cellosolve	0.81740	444.47	904.23	10.27	6.68886e-005	-2.27365e+001
B-Carbitol	0.93150	504.15	960.24	10.08	6.32528e-006	-1.46453e+001
Butoxy3Glycl	1.10801	551.15	992.58	10.05	-1.85372e-004	7.55879e+001
Acetol	0.77358	418.65	1082.43	8.41	0.00000e+000	3.02382e+001
2C4#14Diol	1.13426	511.15	1028.92	9.45	0.00000e+000	2.90634e+001
2M1C3ol	0.58482	380.81	805.46	10.95	0.00000e+000	1.16887e+001
NeoC5Glycol	1.14311	483.00	800.20	11.93	0.00000e+000	-1.37227e+001
12BZdiol	0.69373	518.65	1155.89	8.46	0.00000e+000	-2.41405e+001
13BZdiol	0.67668	549.65	1176.69	8.47	0.00000e+000	-3.08602e+001
HexGlycol	1.15796	470.65	925.77	10.22	0.00000e+000	-3.34777e+001
DiC3=Glycol	1.19769	504.95	1026.20	9.44	0.00000e+000	-3.39877e+001
5M1C6ol	0.78072	445.15	812.06	11.44	0.00000e+000	4.82596e+000
2PHEthanol	0.74293	492.05	1024.93	9.37	0.00000e+000	-4.50925e+001
2PH2C3ol	0.69752	475.15	981.55	9.67	0.00000e+000	-3.94288e+001
2-C9ol	0.89038	471.65	826.79	11.45	0.00000e+000	-1.01234e+001
1C15ol	0.70928	573.15	822.84	12.28	0.00000e+000	3.02038e+001
1C19ol	0.89749	618.15	816.66	12.69	0.00000e+000	3.42564e+001
Glyoxal	0.41328	323.55	1146.18	7.29	0.00000e+000	2.82586e+001
Acrolein	0.33000	326.00	844.32	9.92	0.00000e+000	1.19774e+001
tr-Crotonal	0.34553	377.25	857.21	10.25	0.00000e+000	1.09181e+001
Methacrolein	0.24560	341.15	850.90	9.99	0.00000e+000	-1.34062e+001
n-Hexanal	0.43898	401.45	817.01	10.98	0.00000e+000	4.10359e+001
SalicylAl	0.62597	469.65	1171.40	8.07	0.00000e+000	-2.32130e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
13-C3diol	1.83920e-001	-7.21145e-005	1.26404e-008	-1.92093e-025	1.00000e+000	-0.21468
Glycerol	2.22246e-001	-1.05369e-004	2.34600e-008	-2.78977e-025	1.00000e+000	0.16933
ci214C4=diol	1.79503e-001	-5.11418e-005	2.70529e-009	-7.56199e-026	1.00000e+000	-0.30812
tr214C4=diol	2.22897e-001	-1.28722e-004	6.86477e-008	-2.14782e-011	1.00000e+000	0.55236
12-C4diol	2.25969e-001	-8.48929e-005	1.40041e-008	1.04795e-018	1.00000e+000	0.03492
13-C4diol	2.32901e-001	-9.41975e-005	1.71373e-008	-3.36701e-025	1.00000e+000	-0.34920
14-C4diol	2.39374e-001	-9.92804e-005	1.89450e-008	5.46001e-026	1.00000e+000	-0.03469
23-C4diol	2.25894e-001	-8.48647e-005	1.39994e-008	1.04760e-018	1.00000e+000	0.03085
12-C5diol	2.73403e-001	-1.03001e-004	1.69749e-008	7.08928e-019	1.00000e+000	0.03487
14-C5diol	2.76362e-001	-1.04068e-004	1.68499e-008	5.49657e-019	1.00000e+000	0.03644
15-C5diol	2.80611e-001	-1.10840e-004	1.96249e-008	-2.10327e-025	1.00000e+000	-0.11342
124-C4triol	2.45847e-001	-9.60652e-005	1.63244e-008	9.38105e-019	1.00000e+000	0.13170
Erythritol	2.65797e-001	-1.07266e-004	1.86494e-008	9.23744e-019	1.00000e+000	0.25359
Penterytrito	3.40445e-001	-1.52885e-004	3.44577e-008	-2.68399e-012	1.00000e+000	0.69942
Hydroquinone	3.39748e-001	-2.29158e-004	9.17301e-008	-1.59874e-011	1.00000e+000	-0.43863
123-BZtriol	3.87495e-001	-2.69319e-004	1.05787e-007	-1.77527e-011	1.00000e+000	-0.02933
16-C6diol	3.45748e-001	-1.53357e-004	3.83094e-008	-3.88972e-012	1.00000e+000	-1.33991
2-M24-C5diol	3.86781e-001	-1.79464e-004	3.77997e-008	-3.46049e-025	1.00000e+000	0.00185
THyFurfural	3.42768e-001	-2.00657e-004	7.27245e-008	-1.19130e-011	1.00000e+000	-0.93453
Furfural	2.75067e-001	-1.63256e-004	5.66608e-008	-8.70710e-012	1.00000e+000	-0.29423
Tri-M-ol-C3	4.17692e-001	-2.20396e-004	6.88025e-008	-9.39625e-012	1.00000e+000	-0.03617
TtrC2=Glycol	4.80477e-001	-2.08557e-004	5.08949e-008	-5.94750e-012	1.00000e+000	-0.66921
Sorbitol	5.59914e-001	-3.78945e-004	1.51512e-007	-2.51923e-011	1.00000e+000	0.63734
diAcetone-ol	3.03432e-001	-1.37721e-004	4.57360e-008	-1.00474e-011	1.00000e+000	-0.01748
Cellosolve	2.42428e-001	-9.78617e-005	1.93686e-008	-1.27252e-012	1.00000e+000	-0.26748
M-Cellosolve	1.72628e-001	-5.86479e-005	7.29181e-009	3.34411e-013	1.00000e+000	-0.32199
B-Cellosolve	4.07224e-001	-2.39572e-004	9.97677e-008	-2.10284e-011	1.00000e+000	-0.23576
B-Carbitol	4.90759e-001	-2.29559e-004	6.23670e-008	-7.78140e-012	1.00000e+000	-0.58860
Butoxy3Glycl	3.99102e-001	-7.25318e-005	-1.16998e-008	2.28209e-018	1.00000e+000	0.53915
Acetol	8.73409e-002	4.03358e-005	-6.05495e-008	1.94129e-011	1.00000e+000	-0.64680
2C4#14Diol	1.47172e-001	-4.29888e-005	-3.12246e-009	3.76454e-012	1.00000e+000	0.57292
2M1C3ol	1.77901e-001	-1.82538e-005	-3.30276e-008	1.28592e-011	1.00000e+000	-0.23284
NeoC5Glycol	3.36221e-001	-1.69126e-004	5.14670e-008	-7.65682e-012	1.00000e+000	-1.01548
12BZdiol	3.07994e-001	-1.59963e-004	4.09813e-008	-3.47409e-012	1.00000e+000	-0.35578
13BZdiol	3.51359e-001	-2.34547e-004	9.08160e-008	-1.51515e-011	1.00000e+000	-0.53232
HexGlycol	4.51906e-001	-2.77487e-004	1.05597e-007	-1.78295e-011	1.00000e+000	-0.90678
DiC3=Glycol	4.80674e-001	-3.09416e-004	1.27326e-007	-2.40494e-011	1.00000e+000	-0.91311
5M1C6ol	3.26099e-001	-7.29741e-005	-2.80498e-008	1.47745e-011	1.00000e+000	-0.38416
2PHEthanol	3.96459e-001	-2.16299e-004	7.22465e-008	-1.16090e-011	1.00000e+000	-1.10062
2PH2C3ol	4.20944e-001	-1.86853e-004	3.34706e-008	1.60607e-012	1.00000e+000	-1.44402
2-C9ol	4.71905e-001	-1.79721e-004	1.98030e-008	6.19770e-012	1.00000e+000	-0.16060
1C15ol	6.12224e-001	-7.68500e-005	-1.04083e-007	3.86868e-011	1.00000e+000	-0.95421
1C19ol	7.79843e-001	-1.09978e-004	-1.26096e-007	4.83586e-011	1.00000e+000	-1.00299
Glyoxal	4.33394e-002	1.21076e-005	-1.22641e-008	3.70658e-025	1.00000e+000	0.23576
Acrolein	1.05369e-001	-3.57230e-005	4.76801e-009	-1.38694e-025	1.00000e+000	0.02528
tr-Crotonal	1.63312e-001	-4.72463e-005	5.19622e-009	-1.20316e-025	1.00000e+000	0.02021
Methacrolein	1.72946e-001	-4.03765e-005	-1.13386e-009	-1.20316e-025	1.00000e+000	0.06000
n-Hexanal	2.08369e-001	-4.16520e-005	-1.16534e-009	3.43865e-025	1.00000e+000	0.27516
SalicylAl	3.21538e-001	-1.43118e-004	2.59779e-008	-3.63773e-025	1.00000e+000	-0.06362

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
13-C3diol	-1.36117	Alcohol	-1683000
Glycerol	-1.23877	Alcohol	-1476950
ci214C4=diol	-1.30812	Alcohol	-2169990
tr214C4=diol	0.43730	Alcohol	-2160000
12-C4diol	-0.69959	Alcohol	
13-C4diol	-1.86354	Alcohol	-2268400
14-C4diol	-0.91957	Alcohol	-2280050
23-C4diol	-0.66951	Alcohol	
12-C5diol	-0.66988	Alcohol	-2887300
14-C5diol	-0.68650	Alcohol	-163880
15-C5diol	-1.49670	Alcohol	-2887300
124-C4triol	-0.78824	Alcohol	
Erythritol	-0.78549	Alcohol	
Penterytrito	0.45897	Alcohol	-2498100
Hydroquinone	-2.27273	Alcohol	-2740000
123-BZtriol	-1.61775	Alcohol	-2540000
16-C6diol	-3.01635	Alcohol	-3484100
2-M24-C5diol	-1.02945	Alcohol	-3451000
THyFurfurol	-1.88390	Alcohol	
Furfurol	-1.10986	Alcohol	
Tri-M-ol-C3	-1.13232	Alcohol	-3413600
TtrC2=Glycol	-1.73836	Alcohol	
Sorbitol	0.43736	Alcohol	-2914660
diAcetone-ol	-0.92093	Alcohol	
Cellosolve	-1.24802	Alcohol	-2330000
M-Cellosolve	-1.22649	Alcohol	-1660000
B-Cellosolve	-1.21791	Alcohol	-3550000
B-Carbitol	-1.42674	Alcohol	-4639990
Butoxy3Glycl	0.40970	Alcohol	
Acetol	-1.84307	Alcohol	-1490000
2C4#14Diol	0.45244	Alcohol	-2049990
2M1C3ol	-1.41595	Alcohol	-2448980
NeoC5Glycol	-2.11294	Alcohol	-2868000
12BZdiol	-1.04191	Alcohol	-2733000
13BZdiol	-1.45264	Alcohol	-2719000
HexGlycol	-2.46917	Alcohol	-3451000
DiC3=Glycol	-2.40949	Alcohol	-3340000
5M1C6ol	-1.49293	Alcohol	-4290000
2PHEthanol	-1.97537	Alcohol	-4180000
2PH2C3ol	-2.49266	Alcohol	-4690000
2-C9ol	-1.23720	Alcohol	-5490000
1C15ol	-2.04899	Alcohol	-9114200
1C19ol	-2.20356	Alcohol	-11530000
Glyoxal	-0.17136	Aldehyde	-782535
Acrolein	-0.18218	Aldehyde	-1553500
tr-Crotonal	-0.15162	Aldehyde	-2155550
Methacrolein	-0.20178	Aldehyde	-2150000
n-Hexanal	-0.08095	Aldehyde	-3521750
SalicylAl	-0.46509	Aldehyde	-3200000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
n-Heptanal	687	114.188	602.00	27.00000	0.42100	0.44082	0.48651
p-Tolual	688	120.151	697.00	36.70000	0.41600	0.38534	0.44216
2-E-C6al	689	128.214	607.00	25.80000	0.49099	0.49759	0.51950
n-Octanal	690	128.210	621.10	27.30000	0.50050	0.50571	0.54800
n-Nonanal	691	142.240	640.00	23.30000	0.52700	0.57282	0.59197
n-Decanal	692	156.268	657.00	21.50000	0.57999	0.64134	0.64156
n-Dodecanal	693	184.322	685.00	18.60000	0.68500	0.78631	0.75384
Furfural	694	96.086	657.00	55.12100	0.25200	0.26736	0.44420
2MC3al	695	72.107	507.00	41.00000	0.26300	0.26201	0.36218
pHydroxyBZal	696	122.123	844.00	49.90000	0.36100	0.34763	0.61724
2MC6al	697	114.188	593.00	28.50000	0.43400	0.43429	0.46374
3MC6al	698	114.188	593.00	28.50000	0.43400	0.43407	0.46402
1Octanal	699	128.214	621.00	25.50000	0.47400	0.50668	0.54711
1Undecanal	700	170.294	672.00	20.00000	0.63200	0.71272	0.69659
1Tridecanal	701	198.348	700.00	17.40000	0.73800	0.85919	0.78508
Cl-F5-C3one	702	182.475	410.60	28.80000	0.31000	0.31700	0.34700
perF-C3one	703	166.020	357.10	28.30000	0.32899	0.31920	0.36500
Ketene	704	42.038	370.00	65.00000	0.14496	0.14496	0.20995
M-C2=one	705	70.090	560.92	47.68100	0.26642	0.23520	0.23235
F6-AcetC3one	706	208.059	485.10	27.60000	0.39100	0.39653	0.27799
CC5one	707	84.118	634.60	51.10000	0.26800	0.26859	0.26399
M-n-P-Ketone	708	86.134	561.10	36.70000	0.30098	0.31880	0.34599
M-iP-Ketone	709	86.134	553.40	38.50000	0.31000	0.31560	0.34999
diE-Ketone	710	86.134	561.00	37.20000	0.33599	0.30340	0.34400
CC6one	711	98.145	627.00	39.00000	0.33300	0.32710	0.44800
E-P-Ketone	712	100.160	582.80	33.20000	0.37500	0.37523	0.37799
M-B-Ketone	713	100.160	587.00	33.20000	0.37500	0.37608	0.39199
M-i-B-Ketone	714	100.160	571.00	32.70000	0.37500	0.37580	0.38499
M-Pentyl-one	715	114.188	611.50	34.20000	0.41999	0.50356	0.48300
M-PH-Ketone	716	120.151	714.00	40.60000	0.37599	0.37920	0.36059
diB-Ketone	717	142.242	640.00	23.20000	0.57999	0.55944	0.51599
Acetyl-one	718	100.111	602.00	39.60000	0.32300	0.32462	0.49592
Mesityloxide	719	98.145	600.00	34.10000	0.35499	0.34577	0.32666
5-M-2-C6one	720	114.188	601.00	29.60000	0.42100	0.43678	0.43439
Isophorone	721	138.210	715.00	33.20000	0.45600	0.48341	0.40024
Camphor	722	152.235	709.00	29.80000	0.46000	0.48910	0.31894
BZ-Phenone	723	182.222	815.00	30.10000	0.59100	0.58411	0.54496
3-Hy-2C4one	724	88.120	585.60	48.28000	0.27849	0.30006	0.79400
M2c3=Ketone	725	84.118	566.00	38.90000	0.30200	0.28960	0.28619
33M2C4one	726	100.161	564.00	33.20000	0.36800	0.36761	0.32979
E2C3Ketone	727	100.161	567.00	33.20000	0.36900	0.37161	0.39115
3M2Pentanone	728	100.161	573.00	33.20000	0.36900	0.37247	0.38539
DiIPKetone	729	114.188	576.00	30.20000	0.41600	0.37865	0.40531
3Heptanone	730	114.188	600.00	29.20000	0.42100	0.43802	0.47489
4Heptanone	731	114.188	595.00	29.20000	0.42100	0.43674	0.46614
DiisoBKetone	732	142.240	615.00	24.80000	0.52200	0.56454	0.51161
2Nonanone	733	142.240	643.00	24.10000	0.52700	0.57082	0.57326
2CyHxCC6one	734	180.289	756.00	27.40000	0.59500	0.62259	0.51162
M-Mercaptan	735	48.107	470.00	72.34600	0.14496	0.15080	0.15500

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
n-Heptanal	0.48651	425.95	821.01	11.15	0.00000e+000	4.13703e+001
p-Tolual	0.44216	477.15	1016.34	9.35	0.00000e+000	-3.37420e+001
2-E-C6al	0.51950	433.80	825.83	11.15	0.00000e+000	-1.57894e+001
n-Octanal	0.54800	444.90	824.79	11.26	7.75442e-007	1.05650e+001
n-Nonanal	0.59197	468.15	825.28	11.45	0.00000e+000	4.20959e+001
n-Decanal	0.64156	488.15	827.75	11.57	0.00000e+000	1.31768e+002
n-Dodecanal	0.75384	523.15	833.32	11.76	0.00000e+000	9.53614e+000
Furfural	0.38470	434.85	1153.94	7.99	0.00000e+000	1.65978e+001
2MC3al	0.36218	337.25	794.12	10.66	0.00000e+000	5.57058e+000
pHydroxyBZal	0.61724	583.15	1139.44	8.92	0.00000e+000	-1.46743e+001
2MC6al	0.46374	416.00	823.79	11.02	0.00000e+000	-2.16417e+001
3MC6al	0.46402	416.00	824.27	11.02	0.00000e+000	7.95160e+000
1Octanal	0.54711	447.15	822.98	11.30	0.00000e+000	9.72957e+001
1Undecanal	0.69659	506.15	830.28	11.68	0.00000e+000	7.92070e-001
1Tridecanal	0.78508	540.15	833.52	11.89	0.00000e+000	-1.88692e+000
Cl-F5-C3one	0.34700	281.00	1513.18	5.27	0.00000e+000	-1.68642e+000
perF-C3one	0.36500	245.70	1368.50	5.57	0.00000e+000	-8.50164e+000
Ketene	0.09670	232.00	678.91	11.01	0.00000e+000	6.38839e+000
M-C2=one	0.23235	354.55	863.60	9.97	0.00000e+000	-1.75882e+001
F6-AcetC3one	0.27799	327.30	1456.43	5.76	0.00000e+000	-2.65629e+000
CC5one	0.29490	403.90	953.89	9.43	0.00000e+000	-4.06414e+001
M-n-P-Ketone	0.34599	375.40	805.00	10.90	0.00000e+000	1.14775e+000
M-iP-Ketone	0.33230	367.50	814.22	10.70	0.00000e+000	-2.91594e+000
diE-Ketone	0.34650	375.10	818.62	10.72	0.00000e+000	3.00298e+001
CC6one	0.44089	428.80	950.33	9.65	0.00000e+000	-3.78347e+001
E-P-Ketone	0.37799	396.60	813.00	10.99	0.00000e+000	1.42448e+001
M-B-Ketone	0.39199	400.70	815.00	11.00	0.00000e+000	1.42448e+001
M-i-B-Ketone	0.37430	389.60	804.98	11.04	0.00000e+000	3.89658e+000
M-Pentyl-one	0.48300	424.20	721.12	12.68	0.00000e+000	4.91464e+001
M-PH-Ketone	0.41999	474.90	1032.00	9.20	0.00000e+000	-2.95991e+001
diB-Ketone	0.51599	461.60	827.00	11.37	0.00000e+000	1.91984e+001
Acetyl-one	0.49592	413.55	979.39	9.25	0.00000e+000	6.06207e+000
Mesityloxide	0.32666	402.95	860.63	10.44	0.00000e+000	3.10607e+001
5-M-2-C6one	0.43439	417.95	816.10	11.14	0.00000e+000	1.78090e+000
Isophorone	0.40024	488.35	926.42	10.34	0.00000e+000	-4.64178e+001
Camphor	0.31894	480.57	984.20	9.68	0.00000e+000	-1.32379e+002
BZ-Phenone	0.54496	579.24	1085.13	9.35	0.00000e+000	-6.37139e+001
3-Hy-2C4one	0.79400	416.15	1004.97	9.04	0.00000e+000	-5.74260e+001
M2c3=Ketone	0.28619	371.15	855.68	10.22	0.00000e+000	-4.68938e+000
33M2C4one	0.32979	379.45	810.76	10.86	0.00000e+000	-1.92686e+001
E2C3Ketone	0.39115	386.55	816.22	10.86	0.00000e+000	4.71765e+001
3M2Pentanone	0.38539	390.55	816.05	10.90	0.00000e+000	-2.15416e+001
DiIPKetone	0.40531	397.55	921.54	9.71	0.00000e+000	-6.25375e+001
3Heptanone	0.47489	421.15	822.31	11.09	0.00000e+000	5.74198e+001
4Heptanone	0.46614	417.15	820.69	11.08	0.00000e+000	5.73373e+001
DiisoBKetone	0.51161	441.41	808.93	11.45	0.00000e+000	-3.41382e+000
2Nonanone	0.57326	467.45	824.81	11.45	0.00000e+000	5.73536e+001
2CyHxCC6one	0.51162	537.15	981.12	10.08	0.00000e+000	-1.24497e+002
M-Mercaptan	0.15670	279.10	863.19	9.21	0.00000e+000	1.32678e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
n-Heptanal	2.54841e-001	-5.94205e-005	1.45973e-009	5.64972e-025	1.00000e+000	0.33173
p-Tolual	3.42159e-001	-1.67901e-004	3.88006e-008	-1.88048e-025	1.00000e+000	0.38635
2-E-C6al	3.99998e-001	-1.56815e-004	2.72301e-008	1.16517e-025	1.00000e+000	0.28215
n-Octanal	3.61078e-001	-1.27326e-004	1.79385e-008	-2.31633e-020	1.00000e+000	0.42487
n-Nonanal	3.47645e-001	-9.48257e-005	6.66750e-009	1.72351e-025	1.00000e+000	0.42609
n-Decanal	2.23787e-001	1.58365e-005	-2.38853e-008	9.46742e-026	1.00000e+000	0.46465
n-Dodecanal	5.48246e-001	-2.00802e-004	3.15032e-008	-1.11671e-025	1.00000e+000	0.53223
Furfural	1.38487e-001	1.93548e-005	-5.98736e-008	1.90285e-011	1.00000e+000	0.42340
2MC3al	1.76274e-001	-3.80965e-005	-2.18758e-008	1.25028e-011	1.00000e+000	0.17842
pHydroxyBZal	3.01426e-001	-1.17489e-004	1.14659e-008	2.73629e-012	1.00000e+000	-1.42250
2MC6al	3.70611e-001	-1.60996e-004	3.73659e-008	-3.18987e-012	1.00000e+000	0.32022
3MC6al	3.24633e-001	-1.22983e-004	2.17425e-008	-8.47549e-013	1.00000e+000	0.32002
1Octanal	1.01642e-001	2.30942e-004	-2.08635e-007	5.40400e-011	1.00000e+000	0.38063
1Undecanal	5.32038e-001	-2.28334e-004	5.75466e-008	-6.60399e-012	1.00000e+000	0.49103
1Tridecanal	6.26153e-001	-2.58820e-004	5.78012e-008	-5.00763e-012	1.00000e+000	0.55459
Cl-F5-C3one	2.70519e-001	-1.49466e-004	3.12530e-008	-7.83074e-026	1.00000e+000	-0.00275
perF-C3one	2.73302e-001	-1.49159e-004	3.09289e-008	-1.04773e-025	1.00000e+000	0.14530
Ketene	8.19525e-002	-3.61562e-005	6.74920e-009	1.48565e-026	1.00000e+000	0.32828
M-C2=one	1.82670e-001	-4.88592e-005	-5.07296e-022	1.34467e-025	1.00000e+000	-0.00498
F6-AcetC3one	3.61490e-001	-1.88697e-004	3.83494e-008	-1.99582e-025	1.00000e+000	0.00601
CC5one	2.62922e-001	-1.04201e-004	1.78364e-008	-5.09622e-026	1.00000e+000	-0.04188
M-n-P-Ketone	2.40260e-001	-9.39937e-005	1.66631e-008	-2.95709e-025	1.00000e+000	-0.00428
M-iP-Ketone	2.49715e-001	-9.78956e-005	1.66732e-008	2.08736e-025	1.00000e+000	-0.08414
diE-Ketone	1.97082e-001	-6.36069e-005	8.50063e-009	1.82644e-025	1.00000e+000	-0.01559
CC6one	2.77111e-001	-6.51415e-005	-3.83748e-009	9.41456e-026	1.00000e+000	-0.15286
E-P-Ketone	2.67364e-001	-9.67268e-005	3.66151e-008	-2.52839e-025	1.00000e+000	-0.00980
M-B-Ketone	2.67364e-001	-9.67268e-005	3.66151e-008	-2.52839e-025	1.00000e+000	-0.01131
M-i-B-Ketone	2.82986e-001	-1.10668e-004	2.05905e-008	-3.03407e-026	1.00000e+000	0.05636
M-Pentyl-one	2.37642e-001	-4.84676e-005	-3.35567e-009	-1.15300e-025	1.00000e+000	0.03534
M-PH-Ketone	3.20713e-001	-1.35786e-004	2.43204e-008	-1.21322e-026	1.00000e+000	-0.01275
diB-Ketone	4.01524e-001	-1.46839e-004	4.89473e-008	7.61227e-025	1.00000e+000	-0.02645
Acetyl-one	2.12154e-001	-6.96154e-005	8.59034e-009	-1.41521e-025	1.00000e+000	0.00620
Mesityloxide	2.38820e-001	-9.62720e-005	1.95421e-008	0.00000e+000	1.00000e+000	0.08631
5-M-2-C6one	3.31245e-001	-1.26615e-004	2.13966e-008	6.91803e-026	1.00000e+000	-0.11941
Isophorone	4.70619e-001	-2.09376e-004	4.00136e-008	-1.39556e-026	1.00000e+000	-0.38343
Camphor	6.13015e-001	-2.62243e-004	4.61915e-008	1.22975e-025	1.00000e+000	-0.11388
BZ-Phenone	4.95735e-001	-2.13185e-004	3.78543e-008	1.83997e-025	1.00000e+000	-0.74391
3-Hy-2C4one	2.69539e-001	-1.25443e-004	-5.01127e-023	2.00202e-026	1.00000e+000	-0.02665
M2c3=Ketone	2.15426e-001	-7.59955e-005	5.48234e-009	2.94345e-012	1.00000e+000	-0.11459
33M2C4one	3.09167e-001	-1.15383e-004	1.25972e-008	3.11909e-012	1.00000e+000	0.04028
E2C3Ketone	1.31409e-001	1.18264e-004	-1.40707e-007	4.29353e-011	1.00000e+000	-0.08868
3M2Pentanone	3.15004e-001	-1.26844e-004	2.10511e-008	1.12841e-012	1.00000e+000	-0.11253
DiIPKetone	4.54522e-001	-2.56061e-004	9.09078e-008	-1.46073e-011	1.00000e+000	-0.14992
3Heptanone	1.95007e-001	3.87679e-005	-7.57361e-008	2.12795e-011	1.00000e+000	-0.06243
4Heptanone	1.95160e-001	3.86592e-005	-7.57238e-008	2.12915e-011	1.00000e+000	-0.07159
DiisoBKetone	4.48267e-001	-2.00517e-004	5.45582e-008	-7.17602e-012	1.00000e+000	-0.03235
2Nonanone	2.63022e-001	6.12532e-005	-1.17918e-007	3.40695e-011	1.00000e+000	-0.11806
2CyHxCC6one	5.94975e-001	-9.83695e-005	-8.47622e-008	3.43232e-011	1.00000e+000	-0.60435
M-Mercaptan	7.28193e-002	-5.12337e-005	1.98290e-008	-5.58618e-026	1.00000e+000	0.06051

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
n-Heptanal	-0.04175	Aldehyde	-4136000
p-Tolual	0.09991	Aldehyde	-3970000
2-E-C6al	-0.12138	Aldehyde	-4734300
n-Octanal	0.43684	Aldehyde	-4745400
n-Nonanal	0.02176	Aldehyde	-5355800
n-Decanal	0.05659	Aldehyde	-5964400
n-Dodecanal	0.11945	Aldehyde	-7181450
Furfural	0.10976	Aldehyde	-2249690
2MC3al	-0.20269	Aldehyde	-2291300
pHydroxyBZal	-2.22589	Aldehyde	-3317000
2MC6al	-0.06427	Aldehyde	-4129990
3MC6al	-0.06438	Aldehyde	-4129990
1Octanal	-0.01454	Aldehyde	-4745400
1Undecanal	0.07744	Aldehyde	-6570000
1Tridecanal	0.14108	Aldehyde	-7790000
Cl-F5-C3one	-0.33564	Ketone	
perF-C3one	-0.57274	Ketone	278000
Ketene	0.00891	Ketone	-967758
M-C2=one	-0.18982	Ketone	
F6-AcetC3one	-0.27325	Ketone	278000
CC5one	-0.35975	Ketone	-2697970
M-n-P-Ketone	-0.34286	Ketone	
M-iP-Ketone	-0.32611	Ketone	-2876000
diE-Ketone	-0.19740	Ketone	-2880400
CC6one	-0.71653	Ketone	-3298830
E-P-Ketone	-0.35346	Ketone	
M-B-Ketone	-0.36520	Ketone	
M-i-B-Ketone	-0.23871	Ketone	-3487000
M-Pentyl-one	-0.27522	Ketone	-4099510
M-PH-Ketone	-0.38967	Ketone	-3973000
diB-Ketone	-0.44229	Ketone	
Acetyl-one	-0.27472	Ketone	-2509990
Mesityl oxide	-0.16504	Ketone	-3331000
5-M-2-C6one	-0.44365	Ketone	-4099990
Isophorone	-0.78346	Ketone	-4932940
Camphor	-0.92654	Ketone	-5560000
BZ-Phenone	-1.25434	Ketone	-6292000
3-Hy-2C4one	-0.67022	Ketone	
M2c3=Ketone	-0.28091	Ketone	-2720000
33M2C4one	-0.31751	Ketone	-3483700
E2C3Ketone	-0.39452	Ketone	-3486000
3M2Pentanone	-0.43860	Ketone	-3489990
DiIPKetone	-0.48313	Ketone	-4095000
3Heptanone	-0.41904	Ketone	-4097990
4Heptanone	-0.41726	Ketone	-4089990
DiisoBKetone	-0.41695	Ketone	-5310000
2Nonanone	-0.52234	Ketone	-5321200
2CyHxCC6one	-1.11158	Ketone	-6750000
M-Mercaptan	-0.03619	Misc	-1151700

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
E-Mercaptan	736	62.134	499.00	54.91800	0.20700	0.20227	0.18998
t-B-Mercapta	737	90.189	520.00	40.60000	0.30700	0.31530	0.19070
1Pentanthiol	738	104.216	597.00	34.70000	0.35900	0.37256	0.32110
nPMercaptan	739	76.150	536.00	45.19100	0.26300	0.30793	0.27900
nBMercaptan	740	90.189	567.00	39.70000	0.30700	0.31404	0.27840
2Propanthiol	741	76.160	512.00	43.50000	0.25150	0.31818	0.22300
2Butanethiol	742	90.190	551.00	38.50000	0.30750	0.31446	0.25700
2-M-1C3Thiol	743	90.180	557.00	39.00000	0.30750	0.31296	0.25800
1Hexanethiol	744	118.236	622.00	30.10000	0.42550	0.43336	0.37200
1Heptanthiol	745	132.259	645.00	27.50000	0.48150	0.49594	0.41900
1Octanethiol	746	146.289	665.00	25.00000	0.53750	0.55944	0.46200
1-C9-Thiol	747	160.320	686.40	24.60000	0.59350	0.62635	0.51200
1Decanethiol	748	174.240	702.20	22.40000	0.64950	0.69336	0.55500
1Undecathiol	749	188.369	716.50	20.50000	0.70550	0.76214	0.59600
1Dodecathiol	750	202.399	729.80	18.80000	0.76150	0.83407	0.63600
1Tridecthiol	751	230.449	753.80	16.00000	0.87350	0.97435	0.70700
1OctadecThiol	752	286.558	795.40	11.00000	1.09748	1.26180	0.79800
ThioNaphtene	753	134.201	754.00	41.40000	0.34900	0.40939	0.29550
H2O2	754	34.015	730.15	216.84000	0.07770	0.07533	0.35950
D2O	755	20.031	643.89	219.41000	0.05630	0.05653	0.36770
Argon	756	39.948	150.71	48.63600	0.07490	0.07541	-0.00400
Ozone	757	47.998	261.10	55.70000	0.08890	0.10788	0.69100
HF	758	20.006	461.00	64.70000	0.06920	0.05579	0.32899
N2O4	759	92.011	431.15	101.32000	0.08249	0.19750	1.00740
COS	760	60.070	378.80	61.79800	0.14200	0.14100	0.10407
CS2	761	76.131	552.00	79.03400	0.17200	0.16899	0.10407
diM-Sulphide	762	62.130	502.00	55.20000	0.20100	0.20227	0.19099
diMSulfoxide	763	78.135	729.00	56.50000	0.22698	0.21840	0.20938
diMdiSulphid	764	94.200	605.00	47.00000	0.35800	0.24867	0.23847
M-E-Sulfide	765	76.157	532.00	42.60000	0.26300	0.25984	0.21600
diE-Sulphide	766	90.184	557.00	39.60000	0.31799	0.31639	0.29199
diE-diSulphd	767	122.244	642.00	35.00000	0.47200	0.38019	0.27399
iP-M-Sulphid	768	90.180	551.00	39.00000	0.30750	0.31367	0.25900
M-P-Sulphide	769	90.180	562.00	38.50000	0.31350	0.31307	0.28500
B-M-Sulphide	770	104.208	591.00	33.70000	0.36950	0.37197	0.33200
E-P-Sulphide	771	104.208	582.00	33.70000	0.36950	0.37274	0.32900
B-E-Sulphide	772	118.236	607.00	30.00000	0.42550	0.43332	0.37400
iP-Sulphide	773	118.236	585.70	32.20000	0.41350	0.43372	0.31600
P-Sulphide	774	118.236	609.70	31.60000	0.42550	0.43365	0.37600
MPentylSulph	775	118.236	587.00	31.60000	0.42550	0.42601	0.37600
P-diSulphide	776	150.300	672.00	27.50000	0.47950	0.49384	0.37000
B-Sulphide	777	146.289	650.00	25.00000	0.53750	0.55156	0.39400
B-diSulphide	778	178.350	704.20	26.10000	0.59150	0.63428	0.52900
HexylSulphid	779	202.399	733.70	18.10000	0.76150	0.83610	0.63100
PentylSulphd	780	174.240	700.00	21.30000	0.64950	0.69505	0.55100
PentdiSulphd	781	206.399	726.90	21.80000	0.70350	0.77198	0.61400
HeptylSulphd	782	230.449	762.20	15.40000	0.87350	0.98074	0.70000
ThiaCC6	783	102.190	657.10	46.50000	0.29550	0.31205	0.22000
ThiaCC7	784	116.220	640.10	43.70000	0.39150	0.36194	0.29100

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
E-Mercaptan	0.19144	308.20	836.51	9.82	0.00000e+000	1.49177e+001
t-B-Mercapta	0.19070	337.37	804.82	10.52	4.49578e-007	2.90334e+001
1Pentanthiol	0.32110	399.79	846.09	10.59	2.61251e-006	1.91377e+001
nPMercaptan	0.90484	339.20	845.93	10.03	0.00000e+000	5.42596e+000
nBMercaptan	0.27840	371.61	845.91	10.34	-3.06396e-005	1.78021e+001
2Propanthiol	0.97407	352.70	818.93	10.50	-4.09540e-006	6.63499e+000
2Butanethiol	0.25700	358.10	831.42	10.39	4.45589e-006	6.49098e+000
2-M-1C3Thiol	0.25800	361.60	838.55	10.34	-1.65316e-006	-1.37900e+000
1Hexanethiol	0.37200	425.80	846.17	10.82	6.75379e-007	1.55015e+001
1Heptanthiol	0.41900	450.10	846.23	11.02	-6.69643e-006	1.44959e+001
1Octanethiol	0.46200	472.30	846.64	11.19	-7.08719e-006	1.31309e+001
1-C9-Thiol	0.51200	492.00	847.50	11.33	-1.14312e-005	1.20480e+001
1Decanethiol	0.55500	512.40	847.34	11.49	-1.54260e-005	1.06930e+001
1Undecathiol	0.59600	530.60	847.74	11.62	1.08107e-006	9.59090e+000
1Dodecathiol	0.63600	547.80	846.15	11.76	-1.31339e-005	8.24094e+000
1Trdecethiol	0.70700	579.40	849.40	11.94	-7.25719e-006	5.88196e+000
1OctadecThiol	0.79800	633.20	849.99	12.29	-7.65305e-006	8.73993e-001
ThioNaphtene	0.81641	493.05	1218.51	7.89	2.97657e-005	-4.79967e+001
H2O2	0.35950	423.35	1453.52	6.28	1.15044e-007	3.59915e+001
D2O	0.36770	374.55	1108.05	7.91	-7.22825e-008	3.32769e+001
Argon	-0.00920	87.30	1370.18	3.94	0.00000e+000	2.07849e+001
Ozone	0.69100	161.85	1257.82	5.27	6.19443e-007	2.05399e+001
HF	0.32809	293.00	984.14	8.21	0.00000e+000	2.90731e+001
N2O4	1.00740	302.22	1463.43	5.58	1.03019e-007	2.88320e+001
COS	0.10209	223.00	1015.40	7.27	0.00000e+000	1.92224e+001
CS2	0.10350	319.36	1269.31	6.55	0.00000e+000	2.23442e+001
diM-Sulphide	0.19359	310.50	847.00	9.73	0.00000e+000	2.43145e+001
diMSulfoxide	0.20938	462.15	1105.43	8.51	0.00000e+000	2.80699e+001
diMdiSulphid	0.05294	382.89	1067.43	8.28	0.00000e+000	4.89062e+000
M-E-Sulfide	0.24345	339.80	837.00	10.14	0.00000e+000	1.95417e+001
diE-Sulphide	0.29379	365.30	837.00	10.39	0.00000e+000	1.35988e+001
diE-diSulphd	0.34240	427.10	997.00	9.19	0.00000e+000	2.69165e+001
iP-M-Sulphid	0.25900	357.90	833.83	10.36	-3.81007e-006	1.36188e+001
M-P-Sulphide	0.28500	368.70	846.99	10.30	7.66275e-007	1.60109e+001
B-M-Sulphide	0.33200	396.60	846.77	10.56	-1.23987e-006	1.85016e+001
E-P-Sulphide	0.32900	391.70	841.24	10.58	2.31033e-006	1.57055e+001
B-E-Sulphide	0.37400	417.40	841.51	10.80	-5.60371e-006	1.43612e+001
iP-Sulphide	0.31600	393.20	818.30	10.89	-1.64436e-006	-5.05882e+000
P-Sulphide	0.37600	416.00	841.60	10.79	-3.81322e-006	1.69113e+001
MPentylSulph	0.37600	401.20	847.31	10.59	-3.76008e-006	1.71501e+001
P-diSulphide	0.37000	464.70	963.63	9.78	-3.97211e-006	2.27389e+001
B-Sulphide	0.39400	455.20	837.65	11.17	-3.32884e-006	1.45569e+001
B-diSulphide	0.52900	504.40	941.67	10.28	-5.27839e-006	2.03909e+001
HexylSulphid	0.63100	552.20	843.92	11.83	7.22765e-006	9.65895e+000
PentylSulphd	0.55100	513.20	843.94	11.54	-3.56411e-006	1.20940e+001
PentdiSulphd	0.61400	537.10	925.23	10.69	4.18136e-006	1.79219e+001
HeptylSulphd	0.70000	587.20	844.25	12.07	-4.69641e-006	7.16897e+000
ThiaCC6	0.22000	414.90	990.09	9.16	-8.26541e-006	-5.20449e+001
ThiaCC7	0.29100	414.90	982.35	9.24	-5.99591e-006	-7.05380e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
E-Mercaptan	1.17538e-001	-8.13617e-005	2.56107e-008	-5.64652e-026	1.00000e+000	-0.16651
t-B-Mercapta	1.71280e-001	-2.07169e-005	-2.28694e-008	7.77326e-012	1.00000e+000	0.25557
1Pentanthiol	2.35383e-001	-7.10025e-005	1.16131e-008	-1.69007e-012	1.00000e+000	0.20298
nPMercaptan	2.26826e-001	-5.30295e-005	4.72424e-023	2.30676e-025	1.00000e+000	0.04229
nBMercaptan	1.91006e-001	-5.32567e-005	5.82299e-009	3.69853e-019	1.00000e+000	-0.05652
2Propanthiol	1.81009e-001	-7.57530e-005	1.47639e-008	9.69126e-020	1.00000e+000	0.35248
2Butanethiol	2.27379e-001	-9.23131e-005	1.66877e-008	-1.03269e-019	1.00000e+000	0.37360
2-M-1C3Thiol	2.46769e-001	-1.12297e-004	2.30662e-008	3.69328e-020	1.00000e+000	0.37318
1Hexanethiol	2.87666e-001	-9.14565e-005	1.25364e-008	-1.57145e-020	1.00000e+000	0.39008
1Heptanthiol	3.35406e-001	-1.09849e-004	1.56109e-008	1.48902e-019	1.00000e+000	0.39994
1Octanethiol	3.84067e-001	-1.29289e-004	1.90983e-008	1.67397e-019	1.00000e+000	0.40687
1-C9-Thiol	4.32038e-001	-1.48003e-004	2.23212e-008	2.65861e-019	1.00000e+000	0.42455
1Decanethiol	4.80679e-001	-1.67360e-004	2.57494e-008	3.59350e-019	1.00000e+000	0.42890
1Undecathiol	5.28646e-001	-1.86032e-004	2.89467e-008	-2.41891e-020	1.00000e+000	0.43345
1Dodecathiol	5.77297e-001	-2.05530e-004	3.24666e-008	3.10996e-019	1.00000e+000	0.43796
1Tridecathiol	6.73646e-001	-2.43324e-004	3.90141e-008	1.66949e-019	1.00000e+000	0.44229
1OctadecThiol	8.67193e-001	-3.19876e-004	5.24937e-008	1.81277e-019	1.00000e+000	0.43412
ThioNaphtene	4.07575e-001	-2.70026e-004	1.03835e-007	-1.71302e-011	1.00000e+000	0.74710
H2O2	4.70004e-003	2.14343e-005	-1.71030e-008	4.11546e-012	1.00000e+000	-0.80034
D2O	-2.26471e-003	1.15606e-005	-5.62545e-009	8.94004e-013	1.00000e+000	-0.63838
Argon	-1.60563e-005	1.72214e-008	2.51962e-022	-9.02544e-026	1.00000e+000	0.10857
Ozone	4.00450e-002	-2.08098e-005	4.24248e-009	-1.33300e-020	1.00000e+000	0.55680
HF	3.30763e-004	-6.77779e-007	6.26408e-010	-1.33326e-025	1.00000e+000	0.04065
N2O4	1.15985e-001	-7.90078e-005	2.86728e-008	-4.27039e-012	1.00000e+000	0.74078
COS	5.17705e-002	-3.96711e-005	1.70050e-008	-3.02527e-012	1.00000e+000	-0.37692
CS2	5.57130e-002	-4.70742e-005	2.13954e-008	-3.95327e-012	1.00000e+000	-0.16268
diM-Sulphide	9.38113e-002	-2.29317e-005	1.02539e-009	-1.19197e-025	1.00000e+000	0.03378
diMSulfoxide	1.21560e-001	-3.78463e-005	6.80939e-010	1.89240e-012	1.00000e+000	-0.04808
diMdiSulphid	2.80203e-001	-6.59942e-005	1.09088e-021	-4.75586e-025	1.00000e+000	-0.21570
M-E-Sulfide	1.44637e-001	-4.03251e-005	3.21943e-009	8.45885e-026	1.00000e+000	0.35054
diE-Sulphide	1.98077e-001	-5.93705e-005	6.62651e-009	-1.27487e-025	1.00000e+000	0.06233
diE-diSulphd	2.30200e-001	-9.03905e-005	1.49342e-008	4.93740e-026	1.00000e+000	-0.24770
iP-M-Sulphid	2.02489e-001	-6.98030e-005	1.28654e-008	8.56708e-020	1.00000e+000	0.37487
M-P-Sulphide	1.95965e-001	-6.16597e-005	8.19572e-009	-1.98178e-020	1.00000e+000	0.37396
B-M-Sulphide	2.33669e-001	-6.74016e-005	7.60907e-009	2.74187e-020	1.00000e+000	0.38301
E-P-Sulphide	2.35178e-001	-6.62951e-005	7.06433e-009	-5.26139e-020	1.00000e+000	0.38269
B-E-Sulphide	2.83769e-001	-8.56766e-005	1.05286e-008	1.33102e-019	1.00000e+000	0.39059
iP-Sulphide	3.62697e-001	-1.72763e-004	3.86633e-008	4.26482e-020	1.00000e+000	0.39485
P-Sulphide	2.72850e-001	-7.20071e-005	6.46474e-009	8.94947e-020	1.00000e+000	0.39821
MPentylSulph	2.82265e-001	-8.67967e-005	1.10798e-008	8.50302e-020	1.00000e+000	0.39552
P-diSulphide	3.22476e-001	-1.19603e-004	2.02460e-008	9.16537e-020	1.00000e+000	0.38479
B-Sulphide	3.69193e-001	-1.09789e-004	1.25699e-008	6.84516e-020	1.00000e+000	0.39034
B-diSulphide	4.18793e-001	-1.57360e-004	2.67819e-008	1.23783e-019	1.00000e+000	0.43612
HexylSulphid	5.62396e-001	-1.85962e-004	2.63366e-008	-1.68630e-019	1.00000e+000	0.43282
PentylSulphd	4.65869e-001	-1.47986e-004	1.97363e-008	7.69122e-020	1.00000e+000	0.42275
PentdiSulphd	5.15442e-001	-1.95585e-004	3.35165e-008	-9.43451e-020	1.00000e+000	0.44654
HeptylSulphd	6.59146e-001	-2.24248e-004	3.30966e-008	1.01858e-019	1.00000e+000	0.43759
ThiaCC6	3.16058e-001	-1.12910e-004	1.52567e-008	1.91340e-019	1.00000e+000	0.37575
ThiaCC7	3.63943e-001	-8.04162e-005	-1.22984e-008	1.39440e-019	1.00000e+000	0.37583

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
E-Mercaptan	-0.34246	Misc	-1736600
t-B-Mercapta	-0.24741	Misc	-2939500
1Pentanthiol	-0.14867	Misc	-3565500
nPMercaptan	-0.16838	Misc	
nBMercaptan	-0.25571	Misc	
2Propanthiol	0.47705	Misc	-2339800
2Butanethiol	0.48277	Misc	
2-M-1C3Thiol	0.48290	Misc	
1Hexanethiol	0.45747	Misc	
1Heptanthiol	0.44901	Misc	
1Octanethiol	0.44073	Misc	
1-C9-Thiol	0.43865	Misc	
1Decanethiol	0.42974	Misc	
1Undecathiol	0.42224	Misc	
1Dodecathiol	0.41527	Misc	
1Ttrdecthiol	0.40174	Misc	
1OctadecThiol	0.37643	Misc	
ThioNaphtene	0.43533	Misc	-4309990
H2O2	-0.91827	Misc	-105000
D2O	-1.06998	Misc	0
Argon	0.81971	Misc	0
Ozone	0.51749	Misc	0
HF	-0.17711	Misc	-1959200
N2O4	0.52660	Misc	-9079.29
COS	-0.26491	Misc	-547702.2105
CS2	-0.17381	Misc	-1103547.782
diM-Sulphide	-0.06828	Misc	-1743970
diMSulfoxide	-0.35021	Misc	-1605400
diMdiSulphid	-0.44661	Misc	
M-E-Sulfide	0.48811	Misc	
diE-Sulphide	-0.10852	Misc	-2960500
diE-diSulphd	-0.21750	Misc	
iP-M-Sulphid	0.48307	Misc	
M-P-Sulphide	0.47667	Misc	
B-M-Sulphide	0.46646	Misc	-163880
E-P-Sulphide	0.46578	Misc	
B-E-Sulphide	0.45594	Misc	
iP-Sulphide	0.47129	Misc	
P-Sulphide	0.46068	Misc	
MPentylSulph	0.45956	Misc	
P-diSulphide	0.45247	Misc	
B-Sulphide	0.44736	Misc	
B-diSulphide	0.44118	Misc	
HexylSulphid	0.41263	Misc	-163880
PentylSulphd	0.42607	Misc	
PentdiSulphd	0.42619	Misc	
HeptylSulphd	0.39932	Misc	-163880
ThiaCC6	0.49634	Misc	
ThiaCC7	0.48125	Misc	-163880

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
H2SO4	785	98.080	925.00	64.00000	0.17700	0.09753	1.91600
HCN	786	27.026	456.70	53.70000	0.13880	0.10792	0.38800
HNO3	787	63.013	520.00	68.90100	0.14496	0.13222	0.71438
Cyanogen	788	52.035	400.00	59.70000	0.14793	0.16221	0.27800
SULFOLANE	789	120.166	818.59	52.90300	0.31400	0.31360	0.58631
Formamide	790	45.041	770.00	77.00000	0.16300	0.13252	0.45340
Acetamide	791	59.068	750.00	65.00000	0.21500	0.18242	0.38070
n-M-Formamid	792	59.068	720.00	56.20000	0.21500	0.19095	0.41000
DMF	793	73.095	647.00	44.20000	0.26699	0.24059	0.37549
DEFormamide	794	101.150	671.52	34.56800	0.41757	0.36060	0.46310
diMAcetamide	795	87.120	657.00	40.20000	0.32100	0.28980	0.36350
SELEXOL	796	270.000	786.35	31.54700	0.52929	0.91022	0.44462
BCI3	797	117.191	455.00	38.70000	0.23950	0.23003	0.14000
SilicTrtChl	798	169.897	508.10	35.70000	0.32570	0.32116	0.23200
Hydrazine	799	32.045	652.00	145.00000	0.10100	0.09801	0.31600
11MHydrazine	800	60.110	508.90	57.37000	0.21750	0.22513	0.46189
Thiazole	801	85.130	632.50	66.52000	0.21250	0.21385	0.24650
4-M-Thiazole	802	99.150	652.50	66.20000	0.20350	0.26963	0.24986
Phosgene	803	98.916	455.00	56.70000	0.19009	0.19221	0.20498
Morpholine	804	87.122	617.00	54.70000	0.25299	0.26952	0.37000
C2Anhydride	805	102.083	569.15	46.81200	0.28999	0.32291	0.84020
MaleicAnhydr	806	98.058	721.00	72.80000	0.21900	0.24705	0.54629
PhtlicAnhydr	807	148.117	790.00	47.20000	0.42100	0.41157	0.70840
NitroC1	808	61.041	587.00	63.10000	0.17317	0.16087	0.31000
NitroC2	809	75.070	594.90	51.16000	0.22946	0.21818	0.36844
1-NitroC3	810	89.094	605.00	43.50000	0.28800	0.27549	0.41220
2-NitroC3	811	89.094	592.00	44.50000	0.28800	0.27467	0.37610
1-NitroC4	812	103.120	622.00	37.00000	0.34150	0.33538	0.45200
2-NitroC4	813	103.120	615.00	36.00000	0.33550	0.32171	0.35700
NitroBZ	814	123.000	712.00	35.00000	0.38080	0.32991	0.40180
12-NitroBZ	815	168.108	830.00	38.50000	0.43400	0.45118	0.68740
13-NitroBZ	816	168.108	805.00	38.50000	0.43400	0.42745	0.68170
14-NitroBZ	817	168.108	803.00	38.50000	0.43400	0.46301	0.68610
135-NitroBZ	818	213.106	1004.96	33.70000	0.52000	0.49814	0.80820
Thiophene	819	84.136	579.40	56.70000	0.21897	0.22777	0.19596
2MThiophene	820	98.160	600.00	48.50000	0.27550	0.26615	0.23800
3MThiophene	821	98.160	615.00	49.50000	0.27550	0.28567	0.24200
Thiolane	822	88.174	631.95	51.60000	0.24900	0.26133	0.19880
Thiophenol	823	110.180	689.00	47.30000	0.31499	0.31507	0.26280
14-Dioxane	824	88.106	587.00	52.08100	0.23800	0.25238	0.28040
TCIEtyCarbo	825	225.839	663.15	40.83400	0.36399	0.39811	0.39206
Oxazole	826	69.063	552.00	63.20000	0.23700	0.27504	0.23307
SiCl4	827	169.889	506.00	37.50000	0.32600	0.32014	0.26800
SnCl4	828	260.528	591.90	37.50000	0.35100	0.34665	0.27100
AsCl3	829	181.279	519.40	49.80000	0.25200	0.25580	0.56700
AlCl3	830	133.339	625.60	26.30000	0.26200	0.18261	0.65700
SbCl3	831	228.130	521.00	62.70000	0.27200	0.20520	0.26500
POCl3	832	153.330	602.15	49.60000	0.27600	0.28689	0.18976
Arsine	833	77.945	372.00	65.50000	0.09780	0.08639	0.00580

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
H2SO4	-2.50000	600.00	1850.81	5.54	1.48363e+003	6.83645e+000
HCN	0.38800	298.90	693.96	11.72	4.41953e-007	2.18598e+001
HNO3	0.71438	356.15	1523.64	5.66	1.14918e+003	1.39862e+001
Cyanogen	0.27800	251.00	867.52	8.85	8.85707e-007	3.59398e+001
SULFOLANE	0.35910	558.15	1266.97	7.91	-8.88677e+003	-1.95520e+001
Formamide	0.45340	492.00	1137.06	8.45	2.18493e-007	3.03439e+001
Acetamide	0.38070	494.30	1058.08	9.09	1.73561e-007	1.69787e+001
n-M-Formamid	0.41000	472.66	1006.96	9.41	-2.80600e-005	4.28667e+001
DMF	0.37549	426.15	953.40	9.60	6.55042e+003	1.02112e+001
DEFormamide	0.46310	450.15	910.74	10.24	2.50652e+004	-4.86592e+001
diMAcetamide	0.36350	439.25	944.69	9.79	2.83155e-006	-2.17405e+001
SELEXOL	0.44462	543.15	1030.96	9.63	0.00000e+000	-8.06031e+001
BCI3	0.14000	285.80	1336.46	6.00	1.67042e-006	3.26098e+001
SilicTrtChl	0.23200	330.80	1480.00	5.68	-1.96034e-006	5.65796e+001
Hydrazine	0.31600	386.70	1012.14	8.76	-4.28127e-007	9.76723e+000
11MHydrazine	0.46189	336.15	791.40	10.69	0.00000e+000	-1.85036e+001
Thiazole	0.24650	389.95	1199.80	7.41	4.95194e-007	1.91100e+001
4-M-Thiazole	0.24986	405.85	1118.47	8.05	-1.10452e-006	3.25000e+001
Phosgene	0.20498	281.00	1380.00	5.77	4.38359e-007	2.80891e+001
Morpholine	0.37000	401.40	1000.00	8.97	1.26791e-006	-4.27995e+001
C2Anhydride	0.84020	411.78	1086.56	8.33	8.34052e+003	-1.17934e+001
MaleicAnhydr	0.54629	475.15	1322.93	7.18	0.00000e+000	-8.80926e+001
PhlticAnhydr	0.70840	557.65	1307.31	7.66	5.64963e+003	3.07165e+001
NitroC1	0.32949	374.30	1137.96	7.70	-1.11516e-006	7.41636e+000
NitroC2	0.36844	387.95	1052.00	8.43	2.72497e-006	4.44909e+001
1-NitroC3	0.41220	404.33	1005.53	8.95	-1.43275e-006	-6.96547e+000
2-NitroC3	0.37610	393.40	993.34	8.97	1.03175e-006	1.74271e+001
1-NitroC4	0.45200	426.10	975.32	9.39	1.51691e-006	-4.17400e+000
2-NitroC4	0.35700	412.90	986.85	9.18	4.39056e-008	-1.20620e+001
NitroBZ	0.39987	481.45	1206.56	7.90	-1.68760e-007	6.94987e+000
12-NitroBZ	0.68740	592.00	1359.06	7.52	-4.06369e-005	-1.11900e+001
13-NitroBZ	0.68170	572.00	1422.31	7.10	-4.06369e-005	-1.11900e+001
14-NitroBZ	0.68610	572.00	1314.18	7.68	-4.06369e-005	-1.11900e+001
135-NitroBZ	0.80820	747.00	1682.32	6.56	-1.62706e-005	8.59998e+000
Thiophene	0.19336	357.20	1060.00	8.14	0.00000e+000	-3.06297e+001
2MThiophene	0.23800	385.70	1098.06	8.06	-5.83124e-006	-1.91239e+001
3MThiophene	0.24200	388.60	1026.44	8.65	-2.38740e-006	-2.31466e+001
Thiolane	0.19880	394.27	1004.21	8.88	8.43783e-007	-7.50910e+000
Thiophenol	0.26280	442.29	1081.77	8.57	0.00000e+000	-3.49344e+000
14-Dioxane	0.27790	374.47	1038.91	8.44	1.64290e+004	-6.44573e+001
TCIEtyCarbo	0.39206	443.15	1800.00	5.15	6.42742e-008	5.91802e+001
Oxazole	0.23307	342.65	724.86	11.74	1.05726e+003	1.21979e+001
SiCl4	0.26800	330.75	1495.25	5.63	-2.68409e+004	8.47014e+001
SnCl4	0.27100	387.25	2236.94	3.96	-2.94702e+004	9.60590e+001
AsCl3	0.56700	403.15	2177.05	4.13	-2.32664e+004	7.64745e+001
AlCl3	0.65700	455.85	2455.83	3.81	-2.13812e+004	6.83541e+001
SbCl3	0.26500	493.35	3165.29	3.04	-1.70166e+004	5.55002e+001
POCl3	0.46690	378.65	1683.71	5.23	-1.38690e-007	2.38152e+001
Arsine	-1.85020	210.67	1356.93	5.33	7.97486e-008	3.14038e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
H2SO4	1.78199e-001	-1.41066e-004	6.30118e-008	-1.18337e-011	1.00000e+000	-0.80053
HCN	3.03097e-002	-1.65364e-005	4.53736e-009	-1.01602e-020	1.00000e+000	0.31689
HNO3	8.56832e-002	-4.56125e-005	1.21017e-008	-1.12875e-012	1.00000e+000	0.04678
Cyanogen	4.62648e-002	-2.71598e-005	7.37480e-009	-2.10427e-020	1.00000e+000	0.41492
SULFOLANE	2.62697e-001	-8.77580e-005	-9.70282e-010	5.13186e-012	1.00000e+000	-0.02605
Formamide	8.73138e-003	6.24494e-005	-4.85614e-008	1.14729e-011	1.00000e+000	-0.08472
Acetamide	7.03884e-002	3.27699e-005	-4.50889e-008	1.22644e-011	1.00000e+000	-0.31048
n-M-Formamid	-4.85754e-002	2.39084e-004	-2.14122e-007	6.51142e-011	1.00000e+000	-0.03837
DMF	1.55650e-001	-2.49320e-005	-2.05480e-008	7.75428e-012	1.00000e+000	0.06946
DEFormamide	2.92724e-001	-7.42935e-005	6.27520e-022	6.63880e-025	1.00000e+000	0.38349
diMAcetamide	2.76033e-001	-1.39666e-004	4.65998e-008	-7.38722e-012	1.00000e+000	0.12130
SELEXOL	6.91824e-001	-2.00583e-004	-6.14182e-022	-2.72630e-026	1.00000e+000	0.06777
BCI3	6.94998e-002	-4.86995e-005	1.35971e-008	-4.03017e-020	1.00000e+000	0.31464
SilicTrtChl	8.17993e-002	-6.32324e-005	1.89118e-008	4.93560e-020	1.00000e+000	0.35820
Hydrazine	9.47498e-002	-5.52332e-005	1.50624e-008	2.55811e-021	1.00000e+000	0.01917
11MHydrazine	1.82481e-001	-5.17146e-005	-1.36735e-022	1.18356e-025	1.00000e+000	-0.00502
Thiazole	8.65845e-002	2.53733e-005	-2.37000e-008	-1.03475e-020	1.00000e+000	0.00920
4-M-Thiazole	1.04345e-001	1.79966e-005	-2.69500e-008	2.36495e-020	1.00000e+000	0.45448
Phosgene	6.80499e-002	-4.57996e-005	1.26746e-008	-2.17075e-021	1.00000e+000	0.40538
Morpholine	2.69398e-001	-8.88653e-005	1.04971e-008	-7.14629e-021	1.00000e+000	-0.42419
C2Anhydride	2.30891e-001	-1.01086e-004	2.13391e-008	-1.15015e-012	1.00000e+000	0.02094
MaleicAnhydr	5.85613e-001	-7.45772e-004	5.22498e-007	-1.48704e-010	1.00000e+000	-0.11122
PhtlcAnhydr	4.51330e-002	2.83689e-004	-2.86369e-007	8.83001e-011	1.00000e+000	-0.42855
NitroC1	9.88992e-002	-3.60331e-005	5.21246e-009	2.81303e-020	1.00000e+000	-0.06696
NitroC2	4.15899e-002	1.26866e-004	-4.33996e-008	-1.56859e-020	1.00000e+000	-0.01972
1-NitroC3	2.24964e-001	-1.06336e-004	2.87298e-008	-3.36615e-012	1.00000e+000	0.22673
2-NitroC3	1.58674e-001	-2.19330e-005	-2.05609e-008	7.33690e-012	1.00000e+000	0.20811
1-NitroC4	2.60556e-001	-1.06626e-004	1.91111e-008	-3.45616e-020	1.00000e+000	0.40320
2-NitroC4	2.76144e-001	-1.18673e-004	2.29174e-008	-1.54792e-021	1.00000e+000	0.37195
NitroBZ	1.92129e-001	-7.06661e-006	-2.51245e-008	7.63062e-022	1.00000e+000	-0.05718
12-NitroBZ	3.17058e-001	-1.41186e-004	2.50994e-008	4.95308e-019	1.00000e+000	-0.17736
13-NitroBZ	3.17058e-001	-1.41186e-004	2.50994e-008	4.95308e-019	1.00000e+000	0.28631
14-NitroBZ	3.17058e-001	-1.41186e-004	2.50994e-008	4.95308e-019	1.00000e+000	0.01249
135-NitroBZ	3.36989e-001	-1.44972e-004	2.38242e-008	2.04518e-019	1.00000e+000	-0.67573
Thiophene	2.24054e-001	-1.25817e-004	3.13455e-008	1.74159e-025	1.00000e+000	-0.04757
2MThiophene	2.38298e-001	-1.13230e-004	2.42062e-008	1.37897e-019	1.00000e+000	0.35685
3MThiophene	2.49007e-001	-1.25603e-004	2.84121e-008	5.74804e-020	1.00000e+000	0.38368
Thiolane	1.92246e-001	-4.92689e-005	-7.53489e-009	4.75291e-012	1.00000e+000	0.25071
Thiophenol	2.14104e-001	-6.08108e-005	-9.79095e-009	6.94768e-012	1.00000e+000	0.04126
14-Dioxane	3.31314e-001	-1.80603e-004	5.58398e-008	-7.35050e-012	1.00000e+000	-0.13007
TCIEtyCarbo	3.10348e-001	-2.31794e-004	1.70049e-007	3.76698e-022	1.00000e+000	0.00330
Oxazole	7.57911e-002	4.06972e-005	-5.51733e-008	1.56234e-011	1.00000e+000	0.43271
SiCl4	1.88631e-002	-5.31374e-006	7.92286e-018	-1.79261e-021	1.00000e+000	0.37357
SnCl4	9.79789e-003	-2.73937e-006	3.92879e-017	-8.60122e-021	1.00000e+000	0.36943
AsCl3	5.49230e-003	-1.56098e-006	9.76069e-018	-2.15660e-021	1.00000e+000	0.39972
AlCl3	1.19352e-002	-3.36204e-006	5.77778e-017	-1.27561e-020	1.00000e+000	0.28082
SbCl3	5.54796e-003	-1.56491e-006	3.24668e-017	-7.14755e-021	1.00000e+000	0.16226
POCl3	1.62332e-001	-1.68632e-004	8.71420e-008	-1.75448e-011	1.00000e+000	0.40575
Arsine	6.22445e-004	4.03935e-005	-3.32589e-008	8.23231e-012	1.00000e+000	-0.39473

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
H2SO4	-1.16998	Misc	19600
HCN	0.45192	Misc	
HNO3	-0.36700	Misc	13400
Cyanogen	0.50095	Misc	
SULFOLANE	-0.52644	Misc	
Formamide	-0.48759	Misc	-506039
Acetamide	-0.94521	Misc	-1074000
n-M-Formamid	-0.42087	Misc	-1149500
DMF	-0.16301	Misc	-1788700
DEFormamide	0.45606	Misc	
diMAcetamide	-0.21390	Misc	-2380000
SELEXOL	-0.55285	Misc	
BCI3	0.49617	Misc	
SilicTrtChl	0.48207	Misc	-163880
Hydrazine	-0.11005	Misc	-5341600
11MHydrazine	-0.43726	Misc	
Thiazole	-0.24186	Misc	
4-M-Thiazole	0.51595	Misc	
Phosgene	0.25367	Misc	-174890
Morpholine	-1.06728	Misc	
C2Anhydride	-0.34256	Misc	
MaleicAnhydr	-0.47067	Misc	-1389500
PhtlicAnhydr	-1.01426	Misc	
NitroC1	-0.26111	Misc	-643160
NitroC2	-0.32376	Misc	-1249700
1-NitroC3	-0.16451	Misc	-1858900
2-NitroC3	-0.15913	Misc	-1845500
1-NitroC4	0.45400	Misc	
2-NitroC4	0.46074	Misc	
NitroBZ	-0.45552	Misc	-2978000
12-NitroBZ	-0.84855	Misc	-2843000
13-NitroBZ	-0.26445	Misc	-2813500
14-NitroBZ	-0.66688	Misc	-2806000
135-NitroBZ	-0.98859	Misc	-2679900
Thiophene	-0.28152	Misc	-2435090
2MThiophene	0.48469	Misc	-3035000
3MThiophene	0.49551	Misc	-3033990
Thiolane	-0.13821	Misc	-2764500
Thiophenol	-0.16715	Misc	-3447400
14-Dioxane	-0.61961	Misc	
TCIEtyCarbo	-0.39588	Misc	-163880
Oxazole	0.51403	Misc	-1495200
SiCl4	0.48023	Misc	
SnCl4	0.47822	Misc	
AsCl3	0.39393	Misc	
AlCl3	0.37884	Misc	
SbCl3	0.27465	Misc	
POCl3	0.05724	Misc	
Arsine	-0.64224	Misc	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
CyanogenCl	834	61.470	449.00	59.90000	0.16300	0.13956	0.32211
MCISilane	835	115.030	483.00	39.50000	0.28900	0.28548	0.27575
TriClActylCl	836	181.832	590.00	41.00000	0.33200	0.33877	0.35016
DiClAcetylCl	837	147.386	585.00	46.10000	0.28300	0.28758	0.30893
TriC2C2al	838	147.386	565.00	44.10000	0.28800	0.28986	0.33233
TriClC2oicAc	839	163.386	688.00	48.10000	0.30900	0.32663	0.54903
ChlrocetylCl	840	112.943	581.00	51.10000	0.24500	0.24009	0.35397
DiClC2al	841	112.943	555.00	49.50000	0.23900	0.23501	0.34368
DiClC2oicAc	842	128.942	686.00	51.70000	0.26500	0.27566	0.55499
ClC2al	843	78.498	555.00	53.70000	0.20100	0.18676	0.32970
ClC2oicAcid	844	94.497	686.00	57.80000	0.22100	0.22055	0.54610
MCIC1oate	845	94.497	525.00	53.60000	0.22100	0.22683	0.39207
HydrxyActNtr	846	57.052	664.00	59.30000	0.19500	0.18507	0.80072
AminoActNitr	847	56.067	638.00	54.40000	0.22900	0.21694	0.46569
EG_Dinitrate	848	152.063	654.00	40.40000	0.36200	0.36073	0.79036
ThioGlycAcid	849	92.118	733.00	61.00000	0.23900	0.23634	0.55980
GlycolicAcid	850	76.052	616.00	73.10000	0.17700	0.20475	1.05917
ChloroMthylM	851	80.514	521.00	50.30000	0.21400	0.21401	0.26976
DMDClSilane	852	129.061	520.35	34.90000	0.35800	0.34063	0.26747
2_MercEthanl	853	78.135	629.00	62.70000	0.21900	0.23631	0.67156
12C2DiThiol	854	94.201	663.00	53.60000	0.20900	0.25527	0.25705
DMSilane	855	60.171	402.00	35.60000	0.25800	0.24763	0.13221
PropargylCl	856	74.509	541.00	53.00000	0.21100	0.20311	0.15187
ECIC1oate	857	108.524	508.15	45.00000	0.27400	0.31116	0.83496
MCIC2oate	858	108.524	600.00	45.00000	0.27000	0.27262	0.43404
TNT	859	227.087	680.00	30.00000	0.41900	0.58036	1.18412
3Mrpc3oicac	860	106.141	729.00	50.20000	0.28100	0.31653	0.58853
MetxyActAcid	861	90.078	691.00	49.80000	0.25100	0.26184	0.62616
n_MAcetamide	862	73.095	718.00	49.80000	0.26700	0.24954	0.43511
2C3Mercaptan	863	76.162	517.00	47.50000	0.25400	0.26074	0.21195
TriMAluminum	864	72.086	620.00	40.00000	0.27100	0.28249	0.21791
TMCISilane	865	108.639	497.75	32.00000	0.36600	0.35121	0.27012
3_Amino1C3ol	866	75.111	649.00	55.00000	0.24500	0.27183	0.82727
TMPPhosphate	867	140.076	722.00	56.60000	0.27700	0.37249	0.36953
Cl4Thiophene	868	221.921	753.00	36.70000	0.42800	0.41763	0.36077
MCyanAcetate	869	99.089	687.00	38.10000	0.30500	0.29301	0.54128
ECIC2oate	870	122.551	618.00	37.90000	0.32700	0.33026	0.39324
AcetoneCyaHy	871	85.105	620.00	42.50000	0.29600	0.31538	0.76725
2MAcryAmide	872	85.105	741.00	54.50000	0.29800	0.30767	0.42090
3MtoxyC3Nitr	873	85.105	638.00	36.30000	0.32400	0.28842	0.45970
EThioEthanol	874	106.189	641.00	43.20000	0.32500	0.36079	0.73104
DMrcEtylC2ol	875	138.255	720.00	36.90000	0.37800	0.38571	0.41930
ThioDiGlycol	876	122.188	731.00	46.10000	0.34300	0.42856	1.17637
DESulphite	877	138.188	624.00	37.70000	0.37300	0.40894	0.50651
DESulphate	878	154.186	749.00	64.80000	0.39800	0.42642	0.39114
2AmnEtxyc2ol	879	105.137	699.00	43.60000	0.33000	0.36798	0.96930
nAminoEC2ol	880	104.152	698.00	44.60000	0.32800	0.39575	1.04726
TMSilane	881	88.225	450.40	28.14000	0.35700	0.35850	0.22399
GltrcAnhydrd	882	114.097	838.00	58.00000	0.27500	0.31359	0.53722

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
CyanogenCl	0.32211	286.00	1191.43	6.73	0.00000e+000	2.02564e+001
MCISilane	0.27575	314.70	1115.81	7.42	0.00000e+000	3.65247e+001
TriClActylCl	0.35016	391.15	1628.95	5.46	0.00000e+000	4.88112e+001
DiClAcetylCl	0.30893	380.45	1534.68	5.74	0.00000e+000	2.71790e+001
TriC2C2al	0.33233	370.85	1514.93	5.77	0.00000e+000	4.60065e+001
TriClC2oicAc	0.54903	470.78	1608.02	5.89	0.00000e+000	2.40681e+001
ChlrocetylCl	0.35397	379.15	1422.21	6.19	0.00000e+000	2.88482e+001
DiClC2al	0.34368	362.00	1427.40	6.07	0.00000e+000	4.30845e+001
DiClC2oicAc	0.55499	467.15	1567.55	6.02	0.00000e+000	5.07258e+001
ClC2al	0.32970	358.00	1209.19	7.14	0.00000e+000	2.72383e+001
ClC2oicAcid	0.54610	462.50	1373.56	6.85	0.00000e+000	8.07545e+000
MCIC1oate	0.39207	344.00	1227.92	6.94	0.00000e+000	1.58821e+001
HydrxyActNtr	0.80072	467.00	1101.90	8.57	0.00000e+000	3.76889e+001
AminoActNitr	0.46569	425.00	828.06	11.05	0.00000e+000	3.28464e+001
EG_Dinitrate	0.79036	472.15	1495.31	6.34	0.00000e+000	-2.66460e+001
ThioGlycAcid	0.55980	493.00	1329.82	7.23	0.00000e+000	1.39626e+001
GlycolicAcid	1.05917	443.00	1270.14	7.30	0.00000e+000	4.77533e-001
ChloroMthylM	0.26976	332.65	1072.08	7.86	0.00000e+000	1.86984e+001
DMDClSilane	0.26747	343.35	1078.76	7.90	0.00000e+000	3.76048e+001
2_MercEthanol	0.67156	430.90	1118.80	8.21	0.00000e+000	2.65261e+001
12C2DiThiol	0.25705	419.20	1128.94	8.06	0.00000e+000	3.74650e+001
DMSilane	0.13221	253.55	591.43	13.02	0.00000e+000	2.79301e+001
PropargylCl	0.15187	331.00	1023.90	8.22	0.00000e+000	1.89127e+001
ECIC1oate	0.83496	366.00	1142.31	7.62	0.00000e+000	3.15027e+001
MCIC2oate	0.43404	402.97	1241.68	7.24	0.00000e+000	-1.69996e+001
TNT	1.18412	523.00	1599.06	6.13	4.14333e+004	-4.83457e+002
3Mrpc3oicac	0.58853	501.00	1212.68	7.97	0.00000e+000	2.14374e+001
MetxyActAcid	0.62616	478.26	1179.50	8.07	0.00000e+000	-5.61742e+001
n_MAcetamide	0.43511	478.15	951.09	10.00	0.00000e+000	9.62094e-001
2C3Mercaptan	0.21195	325.71	818.53	10.23	0.00000e+000	3.34749e+001
TriMAluminum	0.21791	400.27	754.82	11.88	0.00000e+000	5.85613e+000
TMCISilane	0.27012	330.75	866.11	9.71	0.00000e+000	3.58756e+001
3_Amino1C3ol	0.82727	460.65	989.09	9.50	0.00000e+000	7.51940e+000
TMPPhosphate	0.36953	465.85	1210.75	7.79	0.00000e+000	5.63656e+001
Cl4Thiophene	0.36077	506.54	1710.43	5.67	0.00000e+000	9.30348e+000
MCyanAcetate	0.54128	478.24	1129.19	8.42	0.00000e+000	-1.66500e+001
ECIC2oate	0.39324	417.35	1155.06	7.87	0.00000e+000	-3.17725e+001
AcetoneCyaHy	0.76725	444.00	935.00	9.93	0.00000e+000	1.31738e+001
2MAcryAmide	0.42090	488.00	837.99	11.43	0.00000e+000	-2.54359e+001
3MtoxyC3Nitr	0.45970	438.15	943.88	9.79	0.00000e+000	1.00955e+001
EThioEthanol	0.73104	456.65	1019.28	9.19	0.00000e+000	2.14323e+001
DMrcEtylC2ol	0.41930	490.15	1169.45	8.20	0.00000e+000	2.13444e+001
ThioDiGlycol	1.17637	555.15	1187.96	8.42	0.00000e+000	2.40848e+001
DESulphite	0.50651	431.15	1088.06	8.45	0.00000e+000	8.40809e+000
DESulphate	0.39114	483.00	1180.82	8.08	0.00000e+000	-1.90838e+001
2AmnEtxyc2ol	0.96930	514.00	1050.93	9.27	0.00000e+000	-9.62052e+000
nAminoEC2ol	1.04726	517.00	1034.02	9.44	0.00000e+000	-1.60509e+001
TMSilane	0.22399	299.80	651.68	12.49	0.00000e+000	6.33654e+001
GltrcAnhydrd	0.53722	562.69	1243.53	8.08	0.00000e+000	-3.96251e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K^2)	Enthalpy Term D (kJ/kgmole/K^3)	Enthalpy Term E (kJ/kgmole/K^4)	Enthalpy Term F (kJ/kgmole/K^5)	Entropy Term	Viscosity A Term
CyanogenCl	6.47203e-002	-6.62018e-005	3.69774e-008	-8.25296e-012	1.00000e+000	0.16641
MCiSilane	1.18504e-001	-6.86725e-005	2.40145e-008	-3.70188e-012	1.00000e+000	0.13816
TriClActylCl	1.45883e-001	-1.15401e-004	4.65857e-008	-6.92134e-012	1.00000e+000	-0.08727
DiClAcetylCl	1.55744e-001	-1.24879e-004	5.60111e-008	-1.03375e-011	1.00000e+000	-0.07250
TriC2C2al	1.16076e-001	-7.94024e-005	3.16519e-008	-5.50285e-012	1.00000e+000	-0.05654
TriClC2oicAc	2.08802e-001	-1.83112e-004	9.03600e-008	-1.83849e-011	1.00000e+000	-1.75265
ChlrocetylCl	1.09405e-001	-6.41497e-005	2.26933e-008	-3.65362e-012	1.00000e+000	-0.18533
DiClC2al	5.69827e-002	2.41095e-005	-4.25368e-008	1.39467e-011	1.00000e+000	-0.66171
DiClC2oicAc	7.68679e-002	-5.27595e-006	-2.13773e-008	8.36724e-012	1.00000e+000	-0.96609
ClC2al	6.75811e-002	1.53069e-006	-2.06833e-008	7.33999e-012	1.00000e+000	-0.84748
ClC2oicAcid	1.54273e-001	-9.63569e-005	3.60491e-008	-6.03128e-012	1.00000e+000	-0.13176
MCiC1oate	1.28434e-001	-4.61171e-005	-1.26795e-008	1.16099e-011	1.00000e+000	-0.21827
HydrxyActNtr	4.48889e-002	1.34207e-005	-1.91964e-008	5.00623e-012	1.00000e+000	-0.85186
AminoActNitr	6.92726e-002	-3.02964e-006	-1.19942e-008	3.54801e-012	1.00000e+000	-0.51755
EG_Dinitrate	3.58000e-001	-2.40129e-004	9.04177e-008	-1.46153e-011	1.00000e+000	-0.21389
ThioGlycAcid	1.61030e-001	-9.99485e-005	4.21035e-008	-8.30741e-012	1.00000e+000	-0.49846
GlycolicAcid	1.75028e-001	-1.12990e-004	4.36993e-008	-7.07595e-012	1.00000e+000	-0.91295
ChloroMthylM	1.17549e-001	-4.99148e-005	1.39200e-008	-1.94292e-012	1.00000e+000	-0.17760
DMDCiSilane	1.63003e-001	-9.33972e-005	3.53468e-008	-6.23260e-012	1.00000e+000	-0.04609
2_MercEthanl	1.11846e-001	-2.75315e-005	-3.30654e-010	9.37198e-013	1.00000e+000	-1.09238
12C2DiThiol	1.02832e-001	-1.67109e-005	-4.30084e-009	1.42638e-012	1.00000e+000	-0.25515
DMSilane	1.09742e-001	5.51665e-006	-3.15161e-008	9.47555e-012	1.00000e+000	0.31914
PropargylCl	1.17157e-001	-7.26808e-005	2.85350e-008	-5.06934e-012	1.00000e+000	0.11136
ECiC1oate	1.27634e-001	-1.96697e-005	-1.41024e-008	5.12958e-012	1.00000e+000	-0.16636
MCiC2oate	2.69995e-001	-2.04045e-004	9.13782e-008	-1.68662e-011	1.00000e+000	-0.06692
TNT	6.78337e-001	-1.85694e-004	-3.19331e-021	8.88535e-025	1.00000e+000	-0.07822
3Mrpc3oicac	2.05491e-001	-1.35000e-004	6.87917e-008	-1.76649e-011	1.00000e+000	-0.54765
MetxyActAcid	4.48962e-001	-5.65223e-004	4.38284e-007	-1.40336e-010	1.00000e+000	-0.31001
n_Macetamide	1.33911e-001	-1.15113e-005	-1.87954e-008	6.02370e-012	1.00000e+000	-0.48388
2C3Mercaptan	1.04524e-001	2.13600e-005	-3.97320e-008	1.11362e-011	1.00000e+000	0.02971
TriMAluminum	1.83241e-001	-6.34793e-005	8.60705e-009	2.80594e-013	1.00000e+000	0.34955
TMCiSilane	2.13369e-001	-1.24739e-004	4.92293e-008	-8.96166e-012	1.00000e+000	-0.06276
3_Amino1C3ol	2.00028e-001	-8.17451e-005	1.79645e-008	-1.61732e-012	1.00000e+000	-0.91817
TMPPhosphate	1.25967e-001	9.77574e-005	-1.16706e-007	3.27239e-011	1.00000e+000	-0.19414
Cl4Thiophene	2.69749e-001	-2.10963e-004	8.76823e-008	-1.49277e-011	1.00000e+000	0.38216
MCyanAcetate	2.58664e-001	-1.31934e-004	1.21328e-008	1.12943e-011	1.00000e+000	-0.26027
ECiC2oate	3.49590e-001	-2.55020e-004	1.10331e-007	-2.00231e-011	1.00000e+000	-0.12758
AcetoneCyaHy	2.12589e-001	-1.10483e-004	3.55306e-008	-5.35910e-012	1.00000e+000	0.48448
2MAcryAmide	3.18880e-001	-2.58997e-004	1.45030e-007	-3.56376e-011	1.00000e+000	-0.04145
3MtoxyC3Nitr	1.94206e-001	-7.56099e-005	1.31759e-008	-4.71524e-013	1.00000e+000	-0.24142
EThioEthanol	2.10210e-001	-6.72325e-005	1.20057e-008	-1.04183e-012	1.00000e+000	0.49603
DMrcEtylC2ol	2.64638e-001	-1.23139e-004	3.90945e-008	-6.56887e-012	1.00000e+000	-0.39931
ThioDiGlycol	2.39933e-001	-1.02486e-004	3.60347e-008	-7.90850e-012	1.00000e+000	-0.62047
DESulphite	2.77772e-001	-1.08199e-004	1.98503e-008	-1.09012e-012	1.00000e+000	-0.04170
DESulphate	3.45394e-001	-2.13208e-004	7.86114e-008	-1.27133e-011	1.00000e+000	0.47109
2AmnEtxyc2ol	3.27860e-001	-2.02357e-004	8.90403e-008	-1.95926e-011	1.00000e+000	-1.17771
nAminoEC2ol	3.43831e-001	-1.90641e-004	6.70535e-008	-1.07983e-011	1.00000e+000	-1.16024
TMSilane	1.38434e-001	1.54663e-005	-4.01644e-008	1.15060e-011	1.00000e+000	0.35063
GltrcAnhydrd	3.12375e-001	-1.32118e-004	3.07365e-008	-3.27100e-012	1.00000e+000	-0.50164

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
CyanogenCl	-0.33912	Misc	-531000
MCISilane	-0.01240	Misc	-1356990
TriClActylCl	-0.80447	Misc	-517199
DiClAcetylCl	-0.67563	Misc	-626470
TriC2C2al	-0.47660	Misc	-672000
TriClC2oicAc	-2.92354	Misc	-473000
ChIrocetylCl	-0.65913	Misc	-744300
DiClC2al	-1.53366	Misc	-811000
DiClC2oicAc	-1.70185	Misc	-530900
ClC2al	-1.16715	Misc	-917000
ClC2oicAcid	-0.73027	Misc	-638300
MCIC1oate	-0.54950	Misc	-689000
HydrxyActNtr	-1.74926	Misc	-1008000
AminoActNitr	-0.85257	Misc	-1336000
EG_Dinitrate	-0.84065	Misc	-1034000
ThioGlycAcid	-0.71845	Misc	-1112980
GlycolicAcid	-2.62153	Misc	-607000
ChloroMthylM	-0.27019	Misc	-1155990
DMDClSilane	-0.32560	Misc	-1942000
2_MercEthanl	-1.86175	Misc	-1560000
12C2DiThiol	-0.39988	Misc	-2049990
DMSilane	0.49808	Misc	-2569000
PropargylCl	-0.01886	Misc	-1670000
ECIC1oate	-0.60256	Misc	-1280000
MCIC2oate	-0.43280	Misc	-1290000
TNT	-1.13908	Misc	-3295900
3Mrpc3oicac	-0.91639	Misc	-1734500
MetxyActAcid	-0.56805	Misc	-1270000
n_MAcetamide	-1.04447	Misc	-1710000
2C3Mercaptan	-0.16197	Misc	-2339800
TriMAluminum	0.48301	Misc	-2984100
TMCISilane	-0.39297	Misc	-2795590
3_Amino1C3ol	-2.12467	Misc	-1980000
TMPPhosphate	-0.48582	Misc	-2200000
Cl4Thiophene	0.46260	Misc	
MCyanAcetate	-0.76161	Misc	-1880990
ECIC2oate	-0.50083	Misc	-1912990
AcetoneCyaHy	0.44377	Misc	-2239110
2MAcryAmide	-0.70260	Misc	-1850000
3MtoxyC3Nitr	-0.44704	Misc	-2289990
EThioEthanol	0.45081	Misc	-2790000
DMrcEtylC2ol	-0.60102	Misc	-3145000
ThioDiGlycol	-1.69435	Misc	-2609980
DESulphite	-0.29199	Misc	-2480000
DESulphate	0.49824	Misc	-2270000
2AmnEtxyc2ol	-2.40528	Misc	-2449990
nAminoEC2ol	-2.62841	Misc	-2740000
TMSilane	0.47440	Misc	-3680000
GltrcAnhydrd	-1.01620	Misc	-2270000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
gValrolctone	883	100.113	727.00	48.40000	0.27900	0.30809	0.40304
nBIsoCyanate	884	99.132	568.00	34.40000	0.36000	0.33877	0.41451
nMTioPyrdone	885	115.195	869.00	43.20000	0.34700	0.27403	0.23812
3MSulfolane	886	134.199	817.00	42.40000	0.35300	0.37636	0.41913
DECarbonate	887	118.133	576.00	33.90000	0.35600	0.37607	0.48477
EthylLactate	888	118.133	588.00	38.60000	0.35400	0.38775	0.79259
tBFormamide	889	101.148	692.00	35.60000	0.38300	0.36623	0.44907
EGMonoPEther	890	104.149	582.00	36.70000	0.34700	0.38768	0.78295
12Cl4NitroBZ	891	192.001	758.00	36.00000	0.43600	0.42750	0.53846
mClPhenol	892	128.557	729.00	53.20000	0.32000	0.33612	0.48558
oClPhenol	893	128.557	675.00	50.00000	0.32500	0.32805	0.43719
pClPhenol	894	128.557	738.00	53.20000	0.32500	0.33053	0.48488
34ClAniline	895	162.018	800.00	41.10000	0.40900	0.39273	0.46780
mClAniline	896	127.569	751.00	45.90000	0.36400	0.34413	0.41983
oClAniline	897	127.569	722.00	45.90000	0.36400	0.34347	0.42133
pClAniline	898	127.569	754.00	45.90000	0.36400	0.34537	0.42099
cDiCyan1C4=	899	106.125	691.00	29.50000	0.39200	0.34408	0.67189
tDiCyan1C4=	900	106.125	689.00	29.50000	0.39200	0.34549	0.66432
14DiCyan2C4=	901	106.125	755.00	29.50000	0.42600	0.38254	0.66681
222NitriloTA	902	134.141	823.00	26.40000	0.48500	0.44345	0.92397
MGlutNitrile	903	108.139	742.00	28.80000	0.40400	0.39493	0.63806
PHHydrazine	904	108.139	761.00	49.10000	0.41800	0.33496	0.53512
BisCyEEther	905	124.138	783.00	28.30000	0.37700	0.43685	0.77755
EAcetAcetate	906	130.143	643.00	32.70000	0.39100	0.41593	0.56070
C3Anhydride	907	130.143	623.00	32.70000	0.39600	0.41852	0.55993
CC6Oxime	908	113.155	715.00	46.90000	0.36900	0.41018	0.46201
2EtxyEC2oate	909	132.158	597.00	24.60000	0.45900	0.43178	0.53318
PGMMEther	910	132.158	597.90	30.09000	0.42100	0.42760	0.47618
CC6Mercaptan	911	116.223	664.00	39.70000	0.35500	0.37331	0.26413
DinC3Sulfone	912	150.242	763.00	31.10000	0.46300	0.49437	0.58206
2(2EyEy)C2ol	913	134.175	632.00	31.40000	0.42000	0.49060	0.90093
TriEAluminum	914	114.166	678.15	89.30000	0.23000	0.49569	0.84178
EAlSesquiCl	915	247.505	747.00	69.60000	0.42800	0.74620	0.43412
6AminoC6ol	916	117.191	665.00	34.40000	0.43600	0.51702	0.96892
nAminoEPipez	917	129.205	708.00	38.50000	0.40700	0.44403	0.55724
TEPhosphate	918	182.156	750.00	66.90000	1.00996	0.56090	0.43837
HexMDiSiloxn	919	162.378	518.70	19.14000	0.60100	0.62289	0.41759
HexMDiSilazn	920	161.395	544.00	19.20000	0.61300	0.63330	0.51010
4Cl3NitroBZ	921	225.554	686.00	27.40000	0.49000	0.50481	0.60378
3NitroTriFBZ	922	191.110	667.00	28.00000	0.46000	0.43959	0.53641
BenzoylCl	923	140.569	697.00	40.60000	0.36700	0.37357	0.41592
BenzoTriCl	924	195.475	737.00	33.40000	0.44700	0.44498	0.25989
PHIsoCyanate	925	119.123	648.00	40.60000	0.34100	0.34502	0.43784
Tetryl	926	287.144	673.00	26.10000	0.66500	0.92322	1.27374
25NitroTolue	927	182.136	814.00	34.00000	0.47200	0.48342	0.74010
26NitroTolue	928	182.136	770.00	34.00000	0.45500	0.47301	0.73777
34NitroTolue	929	182.136	842.00	34.00000	0.48700	0.49698	0.73708
35NitroTolue	930	182.136	814.00	34.00000	0.47300	0.48067	0.70230
Formalinide	931	121.138	787.00	41.10000	0.38200	0.37890	0.54494

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
gValroctone	0.40304	480.65	1057.70	9.01	0.00000e+000	-3.95388e+001
nBIsoCyanate	0.41451	388.15	891.96	9.95	0.00000e+000	2.25373e+001
nMTioPyrdone	0.23812	557.00	1353.93	7.39	0.00000e+000	-5.34383e+001
3MSulfolane	0.41913	549.15	1195.29	8.33	0.00000e+000	2.54360e+001
DECarbonate	0.48477	399.95	980.52	9.14	0.00000e+000	-1.49431e+001
EthylLactate	0.79259	427.65	1044.42	8.78	0.00000e+000	-3.62195e+001
tBFormamide	0.44907	475.15	899.01	10.56	0.00000e+000	-1.15702e+001
EGMonoPEther	0.78295	424.50	915.34	9.99	0.00000e+000	-2.05314e+001
12Cl4NitroBZ	0.53846	529.00	1491.81	6.60	0.00000e+000	-2.13943e+001
mClPhenol	0.48558	487.00	1263.64	7.57	0.00000e+000	-3.27260e+001
oClPhenol	0.43719	447.53	1264.81	7.36	0.00000e+000	-3.27260e+001
pClPhenol	0.48488	493.11	1273.88	7.54	0.00000e+000	-3.27260e+001
34ClAniline	0.46780	545.00	1341.83	7.41	0.00000e+000	-1.59256e+001
mClAniline	0.41983	501.65	1221.20	7.92	0.00000e+000	-2.61381e+001
oClAniline	0.42133	481.99	1213.32	7.86	0.00000e+000	-2.61381e+001
pClAniline	0.42099	503.65	1174.90	8.24	0.00000e+000	-2.20965e+001
cDiCyan1C4=	0.67189	501.00	1071.91	9.01	0.00000e+000	1.30221e+001
tDiCyan1C4=	0.66432	499.00	1064.29	9.07	0.00000e+000	-2.00174e+000
14DiCyan2C4=	0.66681	547.00	956.42	10.40	0.00000e+000	4.45183e+001
222NitroTA	0.92397	623.00	1107.88	9.38	0.00000e+000	1.99272e+001
MGlutNitrile	0.63806	536.15	959.03	10.30	0.00000e+000	3.28943e+001
PHHydrazine	0.53512	516.65	1094.31	8.92	0.00000e+000	-5.72691e+001
BisCyEEther	0.77755	579.00	1052.70	9.63	0.00000e+000	3.37582e+001
EAcetAcetate	0.56070	453.95	1031.93	9.06	0.00000e+000	-4.36755e+001
C3Anhydride	0.55993	440.15	1015.84	9.11	0.00000e+000	-1.86973e+001
CC6Oxime	0.46201	481.15	840.66	11.34	0.00000e+000	-3.03149e+001
2EtyEC2oate	0.53318	429.45	979.42	9.37	0.00000e+000	-4.22261e+001
PGMMEther	0.47618	418.65	974.15	9.34	0.00000e+000	-5.47467e+001
CC6Mercaptan	0.26413	431.95	954.68	9.63	0.00000e+000	-8.91328e+001
DinC3Sulfone	0.58206	543.00	1041.19	9.53	0.00000e+000	2.11924e+001
2(2EyEy)C2ol	0.90093	475.15	993.37	9.56	0.00000e+000	-1.83994e+001
TriEAluminum	0.84178	467.15	839.09	11.25	0.00000e+000	-1.78255e+001
EAlSesquiCl	0.43412	482.15	1096.16	8.70	0.00000e+000	-1.77140e+000
6AminoC6ol	0.96892	496.15	786.29	12.25	0.00000e+000	7.18135e+000
nAminoEPipez	0.55724	493.55	983.77	9.77	0.00000e+000	-1.73891e+001
TEPhosphate	0.43837	484.15	1075.18	8.88	0.00000e+000	-1.02880e+001
HexMDiSiloxn	0.41759	373.67	769.79	11.38	0.00000e+000	9.91626e+001
HexMDiSilazn	0.51010	399.15	772.07	11.60	0.00000e+000	-7.78849e+000
4Cl3NitroBZ	0.60378	495.73	1518.90	6.34	5.64813e+004	-4.59852e+002
3NitroTriFBZ	0.53641	475.93	1438.43	6.60	0.00000e+000	1.04267e+002
BenzoylCl	0.41592	470.15	1217.03	7.77	0.00000e+000	-8.48962e+000
BenzoTriCl	0.25989	486.65	1378.69	6.94	0.00000e+000	-2.15107e+001
PHIsoCyanate	0.43784	438.75	1102.54	8.38	0.00000e+000	-2.76629e+001
Tetryl	1.27374	528.15	1065.33	9.23	0.00000e+000	8.40146e+000
25NitroTolue	0.74010	590.00	1340.41	7.61	4.63765e+004	-2.72013e+002
26NitroTolue	0.73777	558.00	1331.89	7.52	5.13992e+004	-2.79095e+002
34NitroTolue	0.73708	610.00	1308.06	7.89	4.48380e+004	-2.51221e+002
35NitroTolue	0.70230	588.00	1295.93	7.86	4.83791e+004	-2.52967e+002
Formalinide	0.54494	544.15	1078.43	9.21	0.00000e+000	-5.75034e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
gValrolctone	3.95951e-001	-2.93105e-004	1.29244e-007	-2.44470e-011	1.00000e+000	-0.02256
nBIsocyanate	1.70594e-001	-8.40892e-006	-2.50737e-008	5.96791e-012	1.00000e+000	0.38645
nMTioPyrdone	3.35890e-001	-1.78897e-004	6.61460e-008	-1.27052e-011	1.00000e+000	0.27906
3MSulfolane	1.39711e-001	1.94213e-004	-2.41597e-007	7.90064e-011	1.00000e+000	-0.17568
DECarbonate	3.17850e-001	-1.42339e-004	3.34067e-008	-2.97566e-012	1.00000e+000	0.12500
EthylLactate	4.17054e-001	-2.93894e-004	1.27430e-007	-2.38036e-011	1.00000e+000	-0.67007
tBFormamide	2.60867e-001	-5.27012e-005	-3.88776e-008	1.88222e-011	1.00000e+000	0.29769
EGMonoPEther	3.57655e-001	-2.20270e-004	9.66739e-008	-2.10848e-011	1.00000e+000	-0.32550
12Cl4NitroBZ	4.24724e-001	-2.81001e-004	1.03372e-007	-1.60322e-011	1.00000e+000	-0.56566
mClPhenol	3.40670e-001	-2.29571e-004	8.85368e-008	-1.46112e-011	1.00000e+000	-1.44140
oClPhenol	3.40670e-001	-2.29571e-004	8.85368e-008	-1.46112e-011	1.00000e+000	-0.39207
pClPhenol	3.40670e-001	-2.29571e-004	8.85368e-008	-1.46112e-011	1.00000e+000	-0.45383
34ClAniline	3.56242e-001	-2.48009e-004	9.89387e-008	-1.68714e-011	1.00000e+000	-0.67643
mClAniline	3.35236e-001	-2.12182e-004	7.71287e-008	-1.20640e-011	1.00000e+000	-0.79794
oClAniline	3.35236e-001	-2.12182e-004	7.71287e-008	-1.20640e-011	1.00000e+000	-0.55561
pClAniline	3.20126e-001	-1.86400e-004	5.67621e-008	-6.02950e-012	1.00000e+000	-0.25199
cDiCyan1C4=	1.84354e-001	2.06318e-005	-9.70189e-008	3.87855e-011	1.00000e+000	-0.58615
tDiCyan1C4=	2.76703e-001	-1.59279e-004	5.34955e-008	-7.66809e-012	1.00000e+000	-0.58154
14DiCyan2C4=	1.20226e-001	8.10285e-005	-1.21750e-007	4.17044e-011	1.00000e+000	-0.77246
222NitriloTA	3.00472e-001	-1.76157e-004	6.23982e-008	-9.92206e-012	1.00000e+000	0.82643
MGlutNitrile	2.15820e-001	-7.45397e-005	8.49802e-009	9.27072e-013	1.00000e+000	-0.02719
PHHydrazine	4.04255e-001	-2.65502e-004	1.03190e-007	-1.75390e-011	1.00000e+000	-1.90698
BisCyEEther	2.28515e-001	-6.20603e-005	-8.90310e-009	6.10030e-012	1.00000e+000	0.03211
EAcetAcetate	4.26336e-001	-2.75085e-004	1.10268e-007	-1.96021e-011	1.00000e+000	-0.14523
C3Anhydride	3.64848e-001	-2.02005e-004	7.03072e-008	-1.16008e-011	1.00000e+000	-0.03189
CC6Oxime	2.99505e-001	-3.74768e-005	-4.61590e-008	1.62666e-011	1.00000e+000	0.46085
2EtyEC2oate	4.58117e-001	-2.93872e-004	1.19280e-007	-2.23742e-011	1.00000e+000	-0.15060
PGMMEther	5.10970e-001	-3.68581e-004	1.64373e-007	-3.17864e-011	1.00000e+000	-0.31888
CC6Mercaptan	4.59195e-001	-2.55892e-004	9.14959e-008	-1.62352e-011	1.00000e+000	-0.19620
DinC3Sulfone	3.18740e-001	-8.44848e-005	-5.83351e-009	5.91779e-012	1.00000e+000	-0.39150
2(2EyEy)C2ol	4.15136e-001	-2.22405e-004	7.59001e-008	-1.25001e-011	1.00000e+000	-0.25214
TriEAluminum	3.57007e-001	-1.43551e-004	2.98851e-008	-2.26795e-012	1.00000e+000	-0.02259
EAlSesquiCl	4.77521e-001	-2.46142e-004	7.47455e-008	-1.02693e-011	1.00000e+000	0.62179
6AminoC6ol	3.38811e-001	-1.37153e-004	3.23239e-008	-4.35629e-012	1.00000e+000	-0.90625
nAminoEPipez	3.93949e-001	-1.57797e-004	2.97637e-008	-1.27191e-012	1.00000e+000	-0.48480
TEPhosphate	4.42435e-001	-1.89282e-004	4.04093e-008	-2.90155e-012	1.00000e+000	-0.56630
HexMDiSiloxn	2.51090e-001	-7.52111e-006	-4.83789e-008	1.53878e-011	1.00000e+000	0.10208
HexMDiSilazn	4.17957e-001	-1.33416e-004	7.66129e-009	3.84754e-012	1.00000e+000	0.09374
4Cl3NitroBZ	6.72290e-001	-1.83130e-004	1.56256e-021	-6.20622e-025	1.00000e+000	-0.39808
3NitroTriFBZ	8.16991e-002	1.67036e-004	-1.63784e-007	4.37598e-011	1.00000e+000	-0.38511
BenzoylCl	2.71078e-001	-1.33399e-004	3.51022e-008	-3.70578e-012	1.00000e+000	-0.29220
BenzoTriCl	3.83630e-001	-2.74701e-004	1.25694e-007	-2.70582e-011	1.00000e+000	-0.22682
PHIsoCyanate	2.87552e-001	-1.37966e-004	3.39952e-008	-3.09183e-012	1.00000e+000	0.41589
Tetryl	4.61303e-001	-1.15318e-004	-8.06832e-008	4.45495e-011	1.00000e+000	-0.11754
25NitroTolue	5.39731e-001	-1.45066e-004	-2.96611e-021	6.89664e-025	1.00000e+000	-0.75367
26NitroTolue	5.39559e-001	-1.44913e-004	-2.80603e-021	7.26446e-025	1.00000e+000	0.22658
34NitroTolue	5.39068e-001	-1.44474e-004	-7.06216e-022	-2.66670e-025	1.00000e+000	0.11643
35NitroTolue	5.38811e-001	-1.44245e-004	6.68551e-022	-8.00010e-025	1.00000e+000	-0.71365
Formalinide	3.71123e-001	-2.08710e-004	6.34068e-008	-7.84089e-012	1.00000e+000	-0.86078

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
gValrolctone	-0.37876	Misc	-2492910
nBIsoCyanate	0.45374	Misc	-2889990
nMTioPyrdone	0.46637	Misc	-3097000
3MSulfolane	-0.69429	Misc	-2990000
DECarbonate	-0.22049	Misc	-2495400
EthylLactate	-1.60614	Misc	-2481570
tBFormamide	-0.48129	Misc	-2960000
EGMonoPEther	-1.26786	Misc	-2949000
12Cl4NitroBZ	-1.10801	Misc	-2740000
mClPhenol	-2.16586	Misc	-2760000
oClPhenol	-0.93523	Misc	-2790000
pClPhenol	-1.06326	Misc	-2780000
34ClAniline	-0.63404	Misc	-3000000
mClAniline	-1.16433	Misc	-3079140
oClAniline	-0.95016	Misc	-3086470
pClAniline	-0.60558	Misc	-3060000
cDiCyan1C4=	-1.38344	Misc	-3289990
tDiCyan1C4=	-1.38862	Misc	-3289990
14DiCyan2C4=	-1.37918	Misc	-3350000
222NitroTA	0.68583	Misc	-3409000
MGlutNitrile	-0.53091	Misc	-3400040
PHHydrazine	-2.58064	Misc	-3470900
BisCyEEther	-0.57123	Misc	-3260000
EAcetAcetate	-0.58573	Misc	-2960000
C3Anhydride	-0.38622	Misc	-2905990
CC6Oxime	0.47568	Misc	-3609990
2EtxyEC2oate	-0.61017	Misc	-3150000
PGMMEther	-0.81417	Misc	-3149000
CC6Mercaptan	-0.44023	Misc	-3968000
DinC3Sulfone	-0.90201	Misc	-3800000
2(2EyEy)C2ol	-1.04111	Misc	-3420000
TriEAluminum	-0.48942	Misc	-4820170
EAlSesquiCl	0.53587	Misc	
6AminoC6ol	-2.42349	Misc	-3849990
nAminoEPipez	-1.33491	Misc	-4135000
TEPhosphate	-0.55162	Misc	-3848600
HexMDiSiloxn	-0.30232	Misc	-5542400
HexMDiSilazn	-0.35369	Misc	-5960000
4Cl3NitroBZ	-1.09177	Misc	-2418740
3NitroTriFBZ	-0.89863	Misc	-2580000
BenzoylCl	-0.47959	Misc	-3205000
BenzoTriCl	-0.51999	Misc	-3289990
PHIsoCyanate	0.46278	Misc	-3360000
Tetryl	-2.88716	Misc	-3385500
25NitroTolue	-1.24319	Misc	-3446000
26NitroTolue	-0.25548	Misc	-3429000
34NitroTolue	-0.21262	Misc	-3465990
35NitroTolue	-1.17026	Misc	-3437000
Formalinide	-1.61494	Misc	-3449990

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
mNitroToluen	932	137.138	734.00	38.00000	0.44100	0.39495	0.49026
oNitroToluen	933	137.138	720.00	38.00000	0.44100	0.39052	0.48499
pNitroToluen	934	137.138	736.00	38.00000	0.44100	0.39942	0.54065
oNitroAnisol	935	153.138	782.00	37.60000	0.42200	0.42338	0.56134
Guaiacol	936	124.138	697.00	47.30000	0.35300	0.36254	0.56267
pMethoxyPHnl	937	124.138	758.00	49.70000	0.34200	0.36164	0.54054
BZIMercaptan	938	124.207	712.00	40.60000	0.36700	0.36860	0.29934
CC6IsoCyanat	939	125.166	633.00	34.70000	0.37200	0.37099	0.52159
E3EthxyC3ate	940	146.186	609.00	27.20000	0.46200	0.49925	0.57811
PGlyTBether	941	132.203	567.00	29.90000	0.43300	0.50865	0.77378
IsoPhtaylCl	942	203.024	768.00	33.30000	0.47100	0.49914	0.64549
Vanillin	943	152.149	777.00	40.10000	0.41500	0.45398	0.75730
pPhenetidine	944	137.179	754.00	35.70000	0.44600	0.43911	0.53512
ButyricAnhyd	945	158.197	644.00	26.40000	0.50100	0.55157	0.65452
DiESuccinate	946	174.197	666.00	25.30000	0.52200	0.57467	0.67722
DiEGEEther	947	176.212	660.00	24.20000	0.56500	0.60339	0.71450
DitBPeroxide	948	146.229	547.00	24.80000	0.50800	0.54953	0.40315
DinBSulfone	949	178.296	767.00	25.40000	0.56900	0.62536	0.68773
DEGDiEEther	950	162.229	624.00	23.70000	0.55800	0.60173	0.68067
TEGDiMEther	951	178.229	651.00	23.10000	0.54800	0.63735	0.79153
tOctylMercap	952	146.296	627.00	25.90000	0.52900	0.52637	0.30691
OctMCyTrSiln	953	296.618	586.50	13.32000	0.97000	0.98841	0.58899
TolDiisoCyan	954	174.158	725.00	30.40000	0.52500	0.49825	0.65822
8HyQuinoline	955	145.160	788.00	43.60000	0.41400	0.40872	0.52230
AcetVanillon	956	166.177	786.00	36.50000	0.46700	0.51779	0.78557
EVanillin	957	166.177	748.00	32.70000	0.46700	0.53345	1.07278
DPGMMEAcetat	958	190.240	647.00	22.70000	0.60900	0.66520	0.70172
DMIPthalate	959	194.186	764.00	27.90000	0.53900	0.53822	0.62473
DMPthalate	960	194.186	766.00	27.80000	0.53000	0.57393	0.64731
AAcetanilide	961	177.203	803.00	30.30000	0.53400	0.56346	0.80036
DiAlyMaleate	962	196.203	693.00	23.30000	0.60600	0.65401	0.78860
DiPMaleate	963	200.235	691.00	22.00000	0.61400	0.69981	0.78154
pMethaneHypo	964	172.268	711.00	29.50000	0.55300	0.68623	0.90074
TPGMMEther	965	206.281	657.00	21.80000	0.65200	0.83837	1.12539
TetraEGMEthr	966	222.281	705.00	19.40000	0.67400	0.83969	0.96520
DecMCPentSil	967	370.773	619.15	11.60000	1.21598	1.29271	0.66582
ptAmylPhenol	968	164.246	751.00	29.80000	0.54600	0.57578	0.56914
DiBZThiphen	969	184.261	897.00	38.60000	0.51200	0.52404	0.39828
oNtrDiPHAmin	970	214.223	835.00	28.70000	0.62300	0.68242	0.76690
pAminDiPhnyl	971	169.225	817.00	32.90000	0.53900	0.56435	0.54539
pAminoAzoBZ	972	197.240	877.00	29.00000	0.64200	0.67432	0.63449
pAminoDiPHAm	973	184.240	867.00	31.90000	0.59600	0.65180	0.69402
Benzidine	974	184.240	929.00	33.00000	0.59600	0.64297	0.73574
HyAzoBenzene	975	184.240	792.00	30.90000	0.55600	0.60089	0.68002
DiEPhthalate	976	222.240	757.00	23.30000	0.63500	0.72427	0.76256
Bs2HyETereph	977	254.240	846.00	24.70000	0.65600	0.81742	1.60351
DHP	978	194.274	812.00	24.60000	0.68800	0.80757	0.96261
DiBMaleate	979	228.287	716.00	19.00000	0.71900	0.86154	0.89939
Sucrose	980	342.299	1063.00	26.90000	0.76100	0.78015	0.36961

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
mNitroToluen	0.49026	505.00	1161.20	8.34	4.68599e+004	-1.63671e+002
oNitroToluen	0.48499	495.64	1167.31	8.25	4.82388e+004	-1.68932e+002
pNitroToluen	0.54065	511.65	1125.05	8.65	4.49115e+004	-1.46963e+002
oNitroAnisol	0.56134	546.15	1252.92	7.94	4.68704e+004	-2.08149e+002
Guaiacol	0.56267	478.15	1120.13	8.49	0.00000e+000	-4.92906e+001
pMethoxyPHnl	0.54054	516.00	1122.31	8.69	0.00000e+000	-5.77892e+001
BZIMercaptan	0.29934	468.15	1060.71	8.91	0.00000e+000	-3.42937e+001
CC6IsoCyanat	0.52159	442.15	1095.54	8.46	0.00000e+000	-6.77057e+000
E3EthxyC3ate	0.57811	438.15	954.77	9.68	0.00000e+000	-6.86954e+001
PGlyTBEther	0.77378	417.15	874.89	10.39	0.00000e+000	-5.89176e+001
IsoPhtaylCl	0.64549	549.00	1391.53	7.16	0.00000e+000	3.20557e+001
Vanillin	0.75730	558.00	1142.20	8.77	0.00000e+000	-2.91381e+001
pPhenetidine	0.53512	527.00	1065.05	9.23	0.00000e+000	-6.63760e+001
ButyricAnhyd	0.65452	470.93	972.27	9.73	0.00000e+000	2.53699e+001
DiESuccinate	0.67722	489.65	1044.59	9.18	0.00000e+000	-6.21828e+001
DiEGEEther	0.71450	490.55	1015.08	9.45	0.00000e+000	-5.94083e+001
DitBPeroxide	0.40315	384.15	798.56	11.07	0.00000e+000	-7.96645e+000
DinBSulfone	0.68773	564.00	989.93	10.15	0.00000e+000	9.99258e+000
DEGDiEEther	0.68067	462.15	912.32	10.31	0.00000e+000	-3.62037e+001
TEGDiMEther	0.79153	489.15	990.81	9.67	0.00000e+000	-1.84210e+001
tOctylMercap	0.30691	429.00	848.97	10.81	0.00000e+000	-2.58343e+001
OctMCyTrSiln	0.58899	448.15	949.42	9.81	0.00000e+000	-6.99482e+000
TolDiisoCyan	0.65822	524.15	1224.88	8.01	0.00000e+000	1.75386e+001
8HyQuinoline	0.52230	540.00	1171.30	8.46	0.00000e+000	-6.53830e+001
AcetVanillon	0.78557	570.65	1074.91	9.39	0.00000e+000	3.41052e+001
EVanillin	1.07278	567.00	1145.00	8.79	0.00000e+000	-3.82749e+001
DPGMMEAcetat	0.70172	482.45	984.55	9.69	0.00000e+000	-9.45704e+001
DMIPthalate	0.62473	555.15	1214.18	8.23	0.00000e+000	-2.68746e+001
DMPthalate	0.64731	556.85	1197.31	8.36	0.00000e+000	-3.93242e+001
AAcetanilide	0.80036	592.00	1099.94	9.29	0.00000e+000	-8.92976e+001
DiAlyMaleate	0.78860	520.00	1081.42	9.05	0.00000e+000	-6.23827e+001
DiPMaleate	0.78154	521.00	1028.31	9.52	0.00000e+000	-3.31269e+001
pMethaneHypo	0.90074	532.00	944.46	10.44	0.00000e+000	-2.32960e+001
TPGMMEther	1.12539	515.55	974.23	10.01	0.00000e+000	-8.86480e+001
TetraEGMEthr	0.96520	548.95	1014.70	9.82	0.00000e+000	-6.73925e+001
DecMCPentSil	0.66582	484.10	963.96	9.91	0.00000e+000	-6.08824e+000
ptAmylPhenol	0.56914	535.15	911.14	10.84	0.00000e+000	-7.52309e+001
DiBZThiphene	0.39828	604.61	1124.88	9.14	0.00000e+000	-1.35325e+002
oNtrDiPHAmin	0.76690	616.00	1096.31	9.44	0.00000e+000	-2.36498e+001
pAminDiPhnyl	0.54539	575.00	1003.09	10.08	0.00000e+000	-1.00619e+002
pAminoAzoBZ	0.63449	633.00	969.18	10.78	0.00000e+000	-1.72675e+002
pAminoDiPHAm	0.69402	627.15	979.77	10.63	0.00000e+000	-1.14852e+002
Benzidine	0.73574	674.85	987.32	10.81	0.00000e+000	-9.92263e+001
HyAzoBenzene	0.68002	573.00	990.53	10.20	0.00000e+000	-1.21438e+002
DiEPhthalate	0.76256	567.15	1122.26	8.97	0.00000e+000	-1.24914e+002
Bs2HyETereph	1.60351	683.00	1335.31	8.02	0.00000e+000	-5.21472e+001
DHP	0.96261	620.00	955.60	10.86	0.00000e+000	-3.50290e+001
DiBMaleate	0.89939	553.15	998.33	10.00	0.00000e+000	7.09210e+001
Sucrose	0.36961	735.00	1514.32	7.25	0.00000e+000	-5.91537e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
mNitroToluen	4.03274e-001	-1.06446e-004	3.40314e-022	-6.23133e-026	1.00000e+000	-0.83696
oNitroToluen	4.03396e-001	-1.06555e-004	7.84140e-021	-1.44705e-024	1.00000e+000	-0.30969
pNitroToluen	4.02526e-001	-1.05778e-004	4.25392e-021	-9.69318e-025	1.00000e+000	-0.06365
oNitroAnisol	4.52227e-001	-1.20565e-004	3.45183e-021	-6.80371e-025	1.00000e+000	0.06178
Guaiacol	3.87196e-001	-2.10408e-004	5.70788e-008	-3.88129e-012	1.00000e+000	-0.30976
pMethoxyPHnl	4.18852e-001	-2.64378e-004	9.97676e-008	-1.65644e-011	1.00000e+000	-0.37147
BZIMercaptan	3.77145e-001	-2.15261e-004	7.17769e-008	-1.03292e-011	1.00000e+000	-0.33209
CC6IsoCyanat	2.12020e-001	8.71268e-005	-1.22027e-007	3.32261e-011	1.00000e+000	0.41940
E3EthxyC3ate	6.03441e-001	-4.63436e-004	2.26257e-007	-4.87453e-011	1.00000e+000	-0.16944
PGlyTBEther	5.09266e-001	-2.59013e-004	5.91025e-008	-2.32734e-013	1.00000e+000	-0.40077
IsoPhtaylCl	2.63269e-001	-1.15139e-004	2.49098e-008	-2.43799e-012	1.00000e+000	0.45741
Vanillin	4.00958e-001	-1.96307e-004	5.90347e-008	-1.12141e-011	1.00000e+000	-1.31110
pPhenetidine	4.92929e-001	-2.98813e-004	1.09632e-007	-1.85529e-011	1.00000e+000	-0.49242
ButyricAnhyd	4.13722e-001	-1.69238e-004	4.59836e-008	-8.51687e-012	1.00000e+000	0.02246
DiESuccinate	6.49896e-001	-4.84940e-004	2.20155e-007	-4.27706e-011	1.00000e+000	-0.72425
DiEGEEther	6.21991e-001	-4.00156e-004	1.59437e-007	-2.84387e-011	1.00000e+000	-0.21624
DitBPeroxide	4.80487e-001	-2.36660e-004	7.04379e-008	-9.95830e-012	1.00000e+000	0.41510
DinBSulfone	4.43412e-001	-1.63210e-004	2.64222e-008	5.16673e-013	1.00000e+000	-0.36208
DEGDIEEther	5.46541e-001	-2.97958e-004	1.03440e-007	-1.72370e-011	1.00000e+000	0.19003
TEGDIMEther	5.30901e-001	-2.69019e-004	8.46527e-008	-1.30263e-011	1.00000e+000	0.05628
tOctylMercap	4.94226e-001	-2.33060e-004	5.57601e-008	-4.67436e-012	1.00000e+000	-0.00592
OctMCyTrSiln	6.74314e-001	-2.72019e-004	4.58658e-008	-1.93308e-013	1.00000e+000	0.20836
TolDiisoCyan	1.97368e-001	2.69100e-004	-3.80056e-007	1.38558e-010	1.00000e+000	-0.07527
8HyQuinoline	4.95195e-001	-3.24604e-004	1.21140e-007	-1.94911e-011	1.00000e+000	0.43370
AcetVanillon	2.35385e-001	1.44017e-004	-2.53123e-007	9.54026e-011	1.00000e+000	-1.61599
EVanillin	4.65877e-001	-2.28849e-004	6.64613e-008	-1.13631e-011	1.00000e+000	-1.39663
DPGMMEAcetat	7.99887e-001	-6.08201e-004	2.89652e-007	-6.05663e-011	1.00000e+000	-0.10725
DMIPthalate	3.33025e-001	3.68221e-005	-1.63522e-007	6.29114e-011	1.00000e+000	-0.68643
DMPthalate	3.91067e-001	-4.75973e-005	-1.07418e-007	4.85698e-011	1.00000e+000	-0.78960
AAcetanilide	5.83849e-001	-3.77481e-004	1.56750e-007	-3.02007e-011	1.00000e+000	-0.05775
DiAlyMaleate	7.36579e-001	-5.77836e-004	2.65569e-007	-5.10310e-011	1.00000e+000	-0.00863
DiPMaleate	6.63050e-001	-4.64191e-004	2.09832e-007	-4.23277e-011	1.00000e+000	-0.28436
pMethaneHypo	6.03007e-001	-3.17245e-004	1.01097e-007	-1.49006e-011	1.00000e+000	0.53850
TPGMMEther	8.65933e-001	-6.47566e-004	3.18108e-007	-7.08942e-011	1.00000e+000	-0.29641
TetraEGMEthr	7.55753e-001	-4.33895e-004	1.52455e-007	-2.47010e-011	1.00000e+000	-1.31560
DecMCPentSil	8.30443e-001	-3.18823e-004	4.38561e-008	2.73724e-012	1.00000e+000	0.24982
ptAmylPhenol	6.36956e-001	-3.78020e-004	1.33852e-007	-2.10200e-011	1.00000e+000	-1.33274
DiBZThiophene	6.29893e-001	-3.54822e-004	7.76004e-008	2.91451e-012	1.00000e+000	0.41110
oNtrDiPHAmin	4.99761e-001	-2.07936e-004	2.87271e-008	3.46574e-012	1.00000e+000	0.48167
pAminDiPhnyl	6.46358e-001	-4.21008e-004	1.60432e-007	-2.66081e-011	1.00000e+000	-0.44482
pAminoAzoBZ	9.14789e-001	-6.97500e-004	2.98507e-007	-5.35919e-011	1.00000e+000	0.45084
pAminoDiPHAm	7.10652e-001	-4.61055e-004	1.73537e-007	-2.83315e-011	1.00000e+000	-0.70990
Benzidine	7.15922e-001	-4.96805e-004	2.02780e-007	-3.59270e-011	1.00000e+000	-0.81006
HyAzoBenzene	7.06148e-001	-4.61171e-004	1.75613e-007	-2.89933e-011	1.00000e+000	-0.46762
DiEPhthalate	7.44137e-001	-4.65513e-004	1.70231e-007	-2.60579e-011	1.00000e+000	-0.65152
Bs2HyETereph	5.52708e-001	-1.38016e-004	-7.71654e-008	4.35465e-011	1.00000e+000	-1.44821
DHP	5.92856e-001	-2.64110e-004	6.25086e-008	-5.87082e-012	1.00000e+000	0.51677
DiBMaleate	4.49522e-001	-1.23079e-004	-2.96844e-009	6.01201e-012	1.00000e+000	-0.00595
Sucrose	8.65596e-001	-3.89112e-004	8.10010e-008	-4.02260e-012	1.00000e+000	0.38191

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
mNitroToluen	-1.13537	Misc	-3569990
oNitroToluen	-0.62730	Misc	-3590000
pNitroToluen	-0.32034	Misc	-3550000
oNitroAnisol	-0.24583	Misc	-3440000
Guaiacol	-0.84802	Misc	-3470000
pMethoxyPHnl	-1.05701	Misc	-3400000
BZIMercaptan	-0.45074	Misc	-4059990
CC6IsoCyanat	0.44646	Misc	-3849990
E3EthxyC3ate	-0.65158	Misc	-3760000
PGlyTBEther	-1.72959	Misc	-4079000
IsoPhytaylCl	0.44141	Misc	-3329990
Vanillin	-2.08940	Misc	-3660000
pPhenetidine	-1.12020	Misc	-4309990
ButyricAnhyd	-0.40443	Misc	-4120000
DiESuccinate	-1.32316	Misc	-3920000
DiEGEEther	-0.79089	Misc	-4240000
DitBPeroxide	0.45255	Misc	-4940000
DinBSulfone	-0.96827	Misc	-5010000
DEGDIEEther	-0.22265	Misc	-4690000
TEGDiMEther	-0.57888	Misc	-4579980
tOctylMercap	-0.41420	Misc	-5370000
OctMCyTrSiln	-0.48253	Misc	-7368000
TolDiisoCyan	-0.43903	Misc	-3969990
8HyQuinoline	0.45790	Misc	-4300000
AcetVanillon	-2.87934	Misc	-4245000
EVanillin	-3.03803	Misc	-4250000
DPGMMEAcetat	-0.94102	Misc	-4839000
DMIPthalate	-1.14573	Misc	-4413590
DMPthalate	-1.50495	Misc	-4408900
AAcetanilide	-1.87588	Misc	-4990000
DiAlyMaleate	-0.59714	Misc	-4790000
DiPMaleate	-0.72473	Misc	-5080000
pMethaneHypo	0.43797	Misc	-5950000
TPGMMEther	-1.53094	Misc	-5711000
TetraEGMEthr	-1.94307	Misc	-5640000
DecMCPentSil	-0.52737	Misc	-9343800
ptAmylPhenol	-2.77023	Misc	-6050000
DiBZThiophene	0.46631	Misc	-6165000
oNtrDiPHamin	0.43053	Misc	-6120000
pAminDiPhnyl	-0.84886	Misc	-6160000
pAminoAzoBZ	0.43624	Misc	-6380000
pAminoDiPHAm	-1.20120	Misc	-6286420
Benzidine	-1.14855	Misc	-6243980
HyAzoBenzene	-1.37040	Misc	-6394600
DiEPhthalate	-1.32808	Misc	-5635990
Bs2HyETereph	-3.65523	Misc	-5379990
DHP	0.41995	Misc	-6600000
DiBMaleate	-0.61436	Misc	-6360000
Sucrose	0.45169	Misc	-5160540

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
tC12Mrcaptan	981	202.404	691.00	18.60000	0.77100	0.80196	0.60976
TrinBBorate	982	230.156	743.15	19.89000	0.86330	0.82332	0.18871
Acridine	983	179.220	905.00	36.40000	0.54300	0.53195	0.43828
BzylPeroxyde	984	242.231	884.00	25.70000	0.70100	0.76683	0.91359
26tBpCresol	985	220.354	720.00	21.10000	0.75700	0.81036	0.68578
DiiBPhthlate	986	278.346	762.00	17.80000	0.89100	1.02400	0.91584
TriPHPhosphi	987	262.290	1008.00	78.40000	0.55400	0.85902	0.45166
DiHxAdipate	988	314.466	767.00	13.20000	1.04999	1.37056	1.09349
DiiC8Phthala	989	390.562	851.00	11.80000	1.41998	1.65682	1.08797
o-Hydrogen	990	2.016	33.26	13.19700	0.06410	0.07010	-0.21440
p-Hydrogen	991	2.016	32.98	12.92800	0.06414	0.06963	-0.22075
F3AcetoNitri	992	95.023	311.10	36.20000	0.20200	0.29591	0.26699
AcetoNitrile	993	41.053	545.50	48.20000	0.17294	0.15354	0.32699
AcryloNitril	994	53.064	536.00	45.60000	0.20995	0.19280	0.34999
C3-Nitrile	995	55.080	564.40	41.70000	0.22900	0.20870	0.31299
C4-Nitrile	996	69.107	582.20	37.70000	0.28499	0.26530	0.37299
CaproNitrile	997	97.161	622.00	32.50000	0.39800	0.38824	0.52398
BZ-Nitrile	998	103.124	699.40	42.20000	0.35199	0.32515	0.36199
CapryloNitri	999	153.268	688.60	26.80000	0.59399	0.68717	0.85698
SuccinoNitri	1000	80.089	770.00	35.20000	0.30000	0.27952	0.55851
M-acrylNitri	1001	67.091	585.00	39.50000	0.26499	0.25470	0.38999
i-B-Nitrile	1002	69.106	565.00	37.60000	0.27799	0.26596	0.33836
ValeroNitril	1003	83.133	602.00	32.60000	0.33100	0.32185	0.41516
AdipoNitrile	1004	108.138	770.00	28.30000	0.40599	0.40048	0.67229
t-CrotoNitril	1005	67.090	586.00	38.70000	0.28200	0.25217	0.39770
Lactonitrile	1006	71.078	643.00	50.30000	0.24300	0.25306	0.78858
cisCrotonitr	1007	67.090	568.00	38.80000	0.26500	0.24463	0.37871
MAcryNitrile	1008	67.090	554.00	38.80000	0.26500	0.24478	0.30127
VAcetNitrile	1009	67.090	584.00	38.80000	0.25900	0.24399	0.37845
22IminoBisAN	1010	95.104	731.00	35.40000	0.35700	0.33271	0.71920
Piperazine	1011	86.137	638.00	55.30000	0.31000	0.36830	0.41376
GltarNitrile	1012	94.116	782.00	31.50000	0.35200	0.33373	0.60325
PHAcetNitril	1013	117.150	732.00	34.60000	0.39100	0.38219	0.47150
23-Xylenol	1014	122.166	722.80	48.60000	0.46998	0.43478	0.51099
24-Xylenol	1015	122.166	707.60	43.60000	0.50998	0.41609	0.51327
25-Xylenol	1016	122.166	706.90	48.60000	0.46998	0.42434	0.56326
26-Xylenol	1017	122.166	700.00	42.60000	0.51999	0.44892	0.45533
34-Xylenol	1018	122.166	720.00	50.00000	0.34999	0.41310	0.57300
35-Xylenol	1019	122.166	715.60	33.50000	0.61000	0.41277	0.49107
m-Cresol	1020	108.138	705.80	45.60000	0.30899	0.34200	0.45399
o-Cresol	1021	108.138	697.60	50.10000	0.28200	0.33928	0.43299
p-Cresol	1022	108.138	704.60	51.50000	0.27700	0.34907	0.50498
ptrbtylphenl	1023	150.220	734.00	33.20000	0.49300	0.51467	0.50989
BisPhenol	1024	228.291	849.00	29.30000	0.67698	0.87458	0.94498
NonylPhenol	1025	220.354	757.00	20.70000	0.74700	0.80596	0.89980
pCumylPhenol	1026	212.291	834.00	26.80000	0.65900	0.68691	0.66020
ptC8Phenol	1027	206.328	765.00	22.80000	0.70400	0.73652	0.63130
DEAmine	1028	105.138	715.26	32.72900	0.37656	0.37983	1.04674
DIsoPAmine	1029	133.190	672.40	37.70000	0.41499	0.50642	0.98000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
tC12Mrcaptan	0.60976	515.65	861.14	11.33	0.00000e+000	-1.56817e+001
TrinBBorate	0.18871	506.65	862.14	11.25	0.00000e+000	-6.74797e+001
Acridine	0.43828	619.15	1075.54	9.64	0.00000e+000	-5.91014e+001
BzylPeroxyde	0.91359	669.00	1145.18	9.29	0.00000e+000	-1.16094e+002
26tBpCresol	0.68578	538.15	895.51	11.05	0.00000e+000	-8.80246e+001
DiiBPhthlate	0.91584	593.15	1046.56	9.77	0.00000e+000	-1.00457e+002
TriPHPhosphi	0.45166	650.15	1072.91	9.82	0.00000e+000	-1.46600e+002
DiHxAdipate	1.09349	621.15	940.39	11.04	0.00000e+000	-7.64844e+001
DiiC8Phthala	1.08797	694.00	989.38	10.89	0.00000e+000	-7.42076e+001
o-Hydrogen	-0.21440	20.43	70.55	47.14	0.00000e+000	2.17634e+001
p-Hydrogen	-0.22075	20.27	70.84	46.82	0.00000e+000	3.37999e+001
F3AcetoNitri	0.26699	205.50	845.59	8.49	0.00000e+000	2.21442e+001
AcetoNitrile	0.30759	354.80	782.00	11.01	0.00000e+000	2.04878e+001
AcryloNitril	0.33689	350.50	805.00	10.65	0.00000e+000	1.06959e+001
C3-Nitrile	0.31299	370.30	782.00	11.17	0.00000e+000	1.54086e+001
C4-Nitrile	0.37299	391.10	792.00	11.23	0.00000e+000	1.52194e+001
CaproNitrile	0.52398	436.80	809.00	11.41	0.00000e+000	1.76338e+001
BZ-Nitrile	0.35659	464.30	1000.00	9.42	0.00000e+000	-2.60666e+001
CapryloNitri	0.85698	516.00	820.00	11.90	0.00000e+000	3.57957e+001
SuccinoNitri	0.55851	540.15	988.30	10.02	0.00000e+000	1.23674e+001
M-acrylNitri	0.38999	392.00	805.76	11.05	0.00000e+000	2.17140e+001
i-B-Nitrile	0.33836	376.76	775.37	11.33	0.00000e+000	2.02468e+001
ValeroNitril	0.41516	414.45	802.90	11.30	0.00000e+000	1.71412e+001
AdipoNitrile	0.67229	568.15	967.18	10.42	0.00000e+000	-1.34954e+001
t-CrotoNitril	0.39770	394.38	815.95	10.93	2.94493e-006	-7.44460e-001
Lactonitrile	0.78858	457.00	990.78	9.46	0.00000e+000	3.00493e+001
cisCrotonitr	0.37871	380.60	828.39	10.64	0.00000e+000	-7.39323e-001
MAcryNitrile	0.30127	363.45	804.73	10.79	0.00000e+000	2.86535e+001
VAcetNitrile	0.37845	391.67	837.99	10.62	0.00000e+000	2.22504e+001
22IminoBisAN	0.71920	527.00	981.39	10.01	0.00000e+000	1.98750e+001
Piperazine	0.41376	419.15	665.81	13.67	0.00000e+000	-5.96578e+001
GltarNitrile	0.60325	559.15	989.17	10.13	0.00000e+000	1.89484e+001
PHAcetNitril	0.47150	506.65	1018.96	9.52	0.00000e+000	-2.41945e+001
23-Xylenol	0.51099	490.10	942.02	10.18	0.00000e+000	9.74634e+000
24-Xylenol	0.51327	484.10	979.89	9.75	0.00000e+000	-4.14533e+000
25-Xylenol	0.56326	484.30	974.64	9.80	0.00000e+000	-3.94584e-002
26-Xylenol	0.45533	474.20	891.32	10.64	0.00000e+000	-1.55311e+000
34-Xylenol	0.57300	500.10	1011.90	9.54	0.00000e+000	3.54812e+000
35-Xylenol	0.49107	494.90	984.17	9.78	0.00000e+000	-1.12813e+001
m-Cresol	0.45399	475.40	1036.93	9.16	0.00000e+000	-4.50372e+001
o-Cresol	0.43299	464.20	1036.06	9.09	0.00000e+000	-3.22997e+001
p-Cresol	0.50498	475.10	1030.31	9.21	0.00000e+000	-4.06545e+001
ptrbtylphenl	0.50989	512.88	981.80	9.92	0.00000e+000	-7.37103e+001
BisPhenol	0.94498	633.65	1041.06	10.04	0.00000e+000	-1.17235e+002
NonylPhenol	0.61920	581.00	956.69	10.61	4.22249e-005	-5.21587e+001
pCumylPhenol	0.54397	608.15	1079.30	9.55	2.51917e-005	-1.06825e+002
ptC8Phenol	0.63130	563.60	924.47	10.87	0.00000e+000	-1.03994e+002
DEAmine	1.04674	542.15	1095.00	9.06	0.00000e+000	-5.33502e+000
DIsoPAmine	0.98000	521.90	999.00	9.80	0.00000e+000	2.81867e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
tC12Mraptan	6.36836e-001	-2.49975e-004	3.68141e-008	3.85568e-012	1.00000e+000	0.03286
TrinBBorate	7.68302e-001	-3.27807e-004	7.14466e-008	-5.51962e-012	1.00000e+000	-0.12052
Acridine	4.90993e-001	-2.26781e-004	4.87996e-008	-2.20054e-012	1.00000e+000	0.40459
BzylPeroxide	5.93575e-001	-2.49030e-004	3.96779e-008	1.75177e-012	1.00000e+000	0.49249
26tBpCresol	8.54894e-001	-4.75326e-004	1.54655e-007	-2.22901e-011	1.00000e+000	0.06083
DiiBPhthlate	8.10324e-001	-3.06924e-004	-7.85314e-009	3.12221e-011	1.00000e+000	-1.03550
TriPHPhosphi	9.23953e-001	-5.95383e-004	2.25365e-007	-3.69357e-011	1.00000e+000	0.60218
DiHxAdipate	1.04861e+000	-6.52492e-004	2.56007e-007	-4.49076e-011	1.00000e+000	-0.23422
DiiC8Phthala	1.10175e+000	-3.87331e-004	2.63174e-008	1.18781e-011	1.00000e+000	-1.56596
o-Hydrogen	4.00497e-002	-7.70173e-005	6.32067e-008	-1.78638e-011	1.00000e+000	0.00741
p-Hydrogen	-1.07984e-002	1.15881e-005	-5.56508e-009	1.10739e-012	1.00000e+000	0.00296
F3AcetoNitri	1.26031e-001	-7.87485e-005	2.05305e-008	4.70149e-025	1.00000e+000	0.07112
AcetoNitrile	5.98376e-002	-1.49832e-005	8.01256e-010	-2.01047e-025	1.00000e+000	0.08685
AcryloNitril	1.10473e-001	-5.22003e-005	1.15098e-008	1.63421e-025	1.00000e+000	0.08080
C3-Nitrile	1.12319e-001	-3.66897e-005	4.88820e-009	5.28358e-026	1.00000e+000	0.03339
C4-Nitrile	1.60404e-001	-5.46352e-005	7.45969e-009	-1.32583e-025	1.00000e+000	-0.01010
CaproNitrile	2.51049e-001	-8.83430e-005	1.32359e-008	1.56972e-025	1.00000e+000	-0.06326
BZ-Nitrile	2.86792e-001	-1.47763e-004	3.37468e-008	1.50987e-025	1.00000e+000	-0.05155
CapryloNitri	4.16823e-001	-1.42181e-004	2.79520e-008	-5.26188e-025	1.00000e+000	-0.02128
SuccinoNitri	1.71139e-001	-8.46311e-005	1.93166e-008	-1.69826e-025	1.00000e+000	0.33065
M-acrylNitri	1.28683e-001	-3.97579e-005	3.07437e-009	3.38723e-027	1.00000e+000	0.00820
i-B-Nitrile	1.52792e-001	-4.93428e-005	6.26811e-009	-3.48898e-026	1.00000e+000	0.07707
ValeroNitril	2.06254e-001	-7.28037e-005	1.10085e-008	1.59492e-025	1.00000e+000	0.09781
AdipoNitrile	3.23852e-001	-1.70561e-004	3.92487e-008	-2.40221e-025	1.00000e+000	0.27145
t-CrotoNitril	1.68251e-001	-7.63493e-005	1.73648e-008	-1.42587e-012	1.00000e+000	0.23955
Lactonitrile	1.17962e-001	-3.38404e-005	2.90888e-009	4.48635e-013	1.00000e+000	-0.77753
cisCrotonitr	1.58468e-001	-6.25375e-005	9.42620e-009	3.69027e-013	1.00000e+000	0.03579
MAcryNitrile	1.18304e-001	-2.82552e-005	-4.20745e-009	2.38818e-012	1.00000e+000	-0.22064
VAcetNitrile	1.24620e-001	-3.65899e-005	3.97010e-010	1.50898e-012	1.00000e+000	0.01334
22IminoBisAN	1.98622e-001	-1.06447e-004	3.55293e-008	-5.50356e-012	1.00000e+000	0.34506
Piperazine	3.80240e-001	-1.96683e-004	4.40490e-008	-1.78657e-012	1.00000e+000	-0.31436
GlutarNitrile	1.98298e-001	-8.13218e-005	1.54583e-008	-8.84587e-013	1.00000e+000	-0.56729
PHAcetNitril	3.17198e-001	-1.59108e-004	4.47336e-008	-5.27337e-012	1.00000e+000	-0.01683
23-Xylenol	3.14496e-001	-1.27569e-004	2.21719e-008	4.31747e-025	1.00000e+000	-0.64212
24-Xylenol	3.28113e-001	-1.34422e-004	2.35529e-008	-3.70068e-026	1.00000e+000	-0.55017
25-Xylenol	3.21358e-001	-1.29346e-004	2.21933e-008	2.46712e-025	1.00000e+000	-0.32802
26-Xylenol	3.21116e-001	-1.28888e-004	2.20971e-008	8.63493e-026	1.00000e+000	-0.47850
34-Xylenol	3.27310e-001	-1.37659e-004	2.48899e-008	4.56418e-025	1.00000e+000	-0.29304
35-Xylenol	3.35733e-001	-1.38249e-004	2.42930e-008	-9.86849e-026	1.00000e+000	-0.42239
m-Cresol	3.63433e-001	-2.01095e-004	5.19572e-008	-3.27574e-026	1.00000e+000	-1.46063
o-Cresol	3.50475e-001	-1.97595e-004	5.31300e-008	-3.27574e-026	1.00000e+000	-1.19593
p-Cresol	3.52979e-001	-1.92021e-004	4.92046e-008	7.64340e-026	1.00000e+000	-1.46414
ptrbtlyphenl	5.86477e-001	-3.53295e-004	1.25404e-007	-1.95997e-011	1.00000e+000	-1.24026
BisPhenol	8.72008e-001	-5.79535e-004	2.24870e-007	-3.74308e-011	1.00000e+000	0.49904
NonylPhenol	7.55898e-001	-3.78960e-004	1.11756e-007	-1.47695e-011	1.00000e+000	-1.19456
pCumylPhenol	7.66182e-001	-4.42502e-004	1.47059e-007	-2.12461e-011	1.00000e+000	-1.84347
ptC8Phenol	8.49999e-001	-5.01354e-004	1.74027e-007	-2.66295e-011	1.00000e+000	-1.00399
DEAmine	1.77065e-001	-8.63340e-005	7.24961e-022	-1.90843e-025	1.00000e+000	-0.63568
DIsoPAmine	3.62459e-001	-1.46620e-004	4.70097e-008	9.41413e-026	1.00000e+000	-0.02061

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
tC12Mrcaptan	-0.45050	Misc	-7824000
TrinBBorate	-0.39124	Misc	
Acridine	0.45619	Misc	-6383410
BzylPeroxyde	0.41761	Misc	-6349000
26tBpCresol	-0.70096	Misc	-8390000
DiiBPhthlate	-1.95474	Misc	-8039990
TriPHPhosphi	0.52967	Misc	-10031500
DiHxAdipate	-0.79309	Misc	-10100000
DiiC8Phthala	-2.26194	Misc	-12950000
o-Hydrogen	0.29260	Misc	-163880
p-Hydrogen	0.28330	Misc	-241820
F3AcetoNitri	-0.34955	Nitrile	
AcetoNitrile	-0.07504	Nitrile	-1190430
AcryloNitril	-0.05944	Nitrile	-1680000
C3-Nitrile	-0.15351	Nitrile	-1800670
C4-Nitrile	-0.31316	Nitrile	-2414800
CaproNitrile	-0.44980	Nitrile	-3636000
BZ-Nitrile	-0.27652	Nitrile	-3522400
CapryloNitri	-0.73579	Nitrile	
SuccinoNitri	-0.14056	Nitrile	-2197400
M-acrylNitri	-0.19291	Nitrile	-2243000
i-B-Nitrile	-0.20171	Nitrile	-2408400
ValeroNitril	-0.19449	Nitrile	-3022900
AdipoNitrile	-0.25418	Nitrile	-3413500
t-CrotoNitril	-0.07434	Nitrile	-2279000
Lactonitrile	-1.84405	Nitrile	-1650000
cisCrotonitr	-0.20743	Nitrile	-2283000
MAcryNitrile	-0.43112	Nitrile	-2243000
VAcetNitrile	-0.20154	Nitrile	-2296500
22IminoBisAN	-0.13931	Nitrile	-2361990
Piperazine	-0.60482	Nitrile	-2737990
GltarNitrile	-1.07168	Nitrile	-2800000
PHAcetNitril	-0.33451	Nitrile	-4153100
23-Xylenol	-1.84123	Phenol	-4115950
24-Xylenol	-1.75768	Phenol	-4128430
25-Xylenol	-0.83103	Phenol	-4110560
26-Xylenol	-1.77076	Phenol	-4119790
34-Xylenol	-0.93076	Phenol	-4114840
35-Xylenol	-1.10218	Phenol	-4112780
m-Cresol	-2.46392	Phenol	-3527830
o-Cresol	-2.07259	Phenol	-3517350
p-Cresol	-2.50482	Phenol	-3522550
ptrbtylphenl	-2.77023	Phenol	-5360000
BisPhenol	-0.44299	Phenol	-7464800
NonylPhenol	-3.16604	Phenol	-8420000
pCumylPhenol	-2.80857	Phenol	-7690000
ptC8Phenol	-1.43780	Phenol	-8460000
DEAmine	-2.11034	Amine	
DIsoPAmine	-0.82336	Amine	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
Methylamine	1030	31.058	420.00	74.20000	0.12996	0.12229	0.29199
Ethylamine	1031	45.085	456.40	56.20000	0.18197	0.17720	0.28900
diMethylamin	1032	45.085	437.70	53.10000	0.18197	0.18118	0.30199
nPropylamine	1033	59.112	497.00	47.20000	0.23296	0.23025	0.30300
iPropylamine	1034	59.112	471.80	45.20000	0.22100	0.23420	0.29100
triMthylamin	1035	59.112	433.30	40.70000	0.25400	0.24421	0.20498
n-Butylamine	1036	73.139	531.90	42.00000	0.28999	0.28468	0.32899
i-Butylamine	1037	73.139	514.30	41.00000	0.28999	0.28806	0.36800
sec-Btylamin	1038	73.138	514.30	40.00000	0.31000	0.28531	0.28152
trt-Btylamin	1039	73.138	483.90	38.20000	0.29300	0.29045	0.27483
diE-M-Amine	1040	87.170	512.41	33.91500	0.33671	0.35271	0.28659
B-M-Amine	1041	87.170	537.00	33.20000	0.35699	0.36495	0.34970
diPropylamin	1042	101.193	555.80	29.80000	0.41600	0.41716	0.47099
di-iP-Amine	1043	101.193	523.10	30.10000	0.41800	0.40926	0.36000
triEthylamin	1044	101.193	535.00	30.30000	0.38899	0.40259	0.31999
Caprolactam	1045	113.152	805.00	47.70000	0.40200	0.36278	0.47710
diButylamine	1046	129.246	607.50	26.30000	0.52398	0.55128	0.57999
di-iB-Amine	1047	129.246	584.40	27.10000	0.52398	0.55664	0.54799
triButylamin	1048	185.354	642.00	18.10000	0.73500	0.81348	0.69428
Aniline	1049	93.129	699.00	53.10000	0.27399	0.29010	0.38400
n-M-Aniline	1050	107.152	700.00	52.00000	0.41699	0.35683	0.47499
nn-diM-Anili	1051	121.180	687.00	36.20000	0.41400	0.40784	0.41100
n-E-Aniline	1052	121.180	697.00	40.00000	0.41400	0.41804	0.48342
n-B-Aniline	1053	149.235	720.00	28.30000	0.53500	0.54132	0.54163
Pentylamine	1054	87.165	555.00	35.70000	0.36500	0.34678	0.40700
Hexylamine	1055	101.192	582.00	31.80000	0.41800	0.41095	0.46707
Pyridine	1056	79.102	620.00	56.20000	0.25400	0.23958	0.24300
2-M-Pyridine	1057	93.129	621.00	46.00000	0.33500	0.29835	0.29899
3-M-Pyridine	1058	93.129	645.00	46.50000	0.31099	0.29543	0.27063
4-M-Pyridine	1059	93.129	645.00	46.60000	0.32570	0.29881	0.30098
m-Toluidine	1060	107.152	709.00	41.50000	0.34999	0.34994	0.40999
o-Toluidine	1061	107.152	694.00	37.50000	0.34999	0.34768	0.43799
p-Toluidine	1062	107.152	667.00	23.80000	0.34999	0.35824	0.44299
Ethylenimine	1063	43.068	537.00	68.50000	0.17294	0.18738	0.20069
C2=diAmine	1064	60.099	592.00	62.70000	0.20600	0.16234	0.50998
AllylAmine	1065	57.095	505.00	51.70000	0.24695	0.21297	0.32651
Pyrrole	1066	67.091	639.80	72.50000	0.22400	0.40310	0.34419
Pyrrolidine	1067	71.123	568.60	56.10000	0.24898	0.24086	0.27399
nMPyrrolidin	1068	85.149	550.00	42.00000	0.29800	0.30048	0.22698
nMPyrrolidon	1069	99.133	724.00	47.83000	0.31099	0.30862	0.36111
Piperidine	1070	85.150	592.00	47.60000	0.28900	0.29146	0.25099
CC6Amine	1071	99.176	615.00	42.00000	0.36000	0.35104	0.36037
HPM-OX	1072	171.000	807.00	36.07100	0.45000	0.59688	0.95736
THEED	1073	198.000	840.40	34.64300	0.59350	1.19298	1.85538
HxC1=imine	1074	99.176	615.00	42.70000	0.36100	0.34345	0.32964
HxC1=diAmine	1075	116.207	662.00	32.70000	0.47499	0.42598	0.65008
Cumidine	1076	135.210	717.00	33.50000	0.43150	0.42050	0.47408
Indole	1077	117.150	790.00	43.00000	0.43100	0.40097	0.37420
UCARSOL	1078	123.392	697.25	38.58400	0.33680	0.25203	0.58000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
Methylamine	0.28720	266.80	667.43	11.73	0.00000e+000	1.14874e+001
Ethylamine	0.28709	289.70	607.32	13.25	0.00000e+000	3.69537e+000
diMethylamin	0.30439	270.00	660.94	11.90	0.00000e+000	-1.72114e-001
nPropylamine	0.30300	321.70	724.12	11.51	0.00000e+000	6.69478e+000
iPropylamine	0.29100	305.60	693.97	11.81	0.00000e+000	-7.49054e+000
triMthylamin	0.20498	276.00	640.18	12.37	0.00000e+000	-8.21058e+000
n-Butylamine	0.32899	349.50	748.94	11.44	0.00000e+000	5.08230e+000
i-Butylamine	0.36800	340.60	737.97	11.51	0.00000e+000	9.49636e+000
sec-Btylamin	0.28152	336.15	729.26	11.60	0.00000e+000	7.26370e+000
trt-Btylamin	0.27483	317.55	697.66	11.90	0.00000e+000	1.32014e+001
diE-M-Amine	0.28659	339.15	702.00	12.08	0.00000e+000	-1.26222e+001
B-M-Amine	0.34970	364.25	703.38	12.35	0.00000e+000	-2.86717e+000
diPropylamin	0.47099	382.50	745.29	11.85	0.00000e+000	6.46401e+000
di-iP-Amine	0.36000	357.10	722.00	11.95	0.00000e+000	-1.53409e+001
triEthylamin	0.31959	362.50	732.94	11.83	0.00000e+000	-1.84414e+001
Caprolactam	0.47710	543.15	1060.56	9.36	0.00000e+000	-7.10600e-001
diButylamine	0.57999	432.80	764.36	12.04	0.00000e+000	9.77003e+000
di-iB-Amine	0.54799	412.80	740.00	12.24	0.00000e+000	-2.12480e+001
triButylamin	0.69428	486.60	781.27	12.25	0.00000e+000	7.99784e+000
Aniline	0.38089	457.60	1024.41	9.15	0.00000e+000	-4.05109e+001
n-M-Aniline	0.47499	469.40	989.00	9.56	0.00000e+000	-1.71711e+001
nn-diM-Anili	0.41100	467.30	956.35	9.87	0.00000e+000	-6.03731e+001
n-E-Aniline	0.48342	476.20	955.00	9.95	0.00000e+000	-1.55171e+001
n-B-Aniline	0.54163	513.90	932.00	10.45	0.00000e+000	-3.40910e+001
Pentylamine	0.40700	377.65	758.95	11.59	0.00000e+000	4.95409e+000
Hexylamine	0.46707	404.65	768.05	11.72	0.00000e+000	3.66001e+001
Pyridine	0.24300	388.40	988.77	8.98	0.00000e+000	-2.24841e+001
2-M-Pyridine	0.29899	402.60	948.98	9.47	0.00000e+000	-3.62829e+001
3-M-Pyridine	0.27063	417.30	961.09	9.46	0.00000e+000	-3.71126e+001
4-M-Pyridine	0.30098	418.50	958.29	9.50	0.00000e+000	-1.74400e+001
m-Toluidine	0.40999	476.60	992.87	9.57	0.00000e+000	-1.59978e+001
o-Toluidine	0.43799	473.50	1001.96	9.46	0.00000e+000	-1.16761e+001
p-Toluidine	0.44299	473.70	964.00	9.84	0.00000e+000	-1.58681e+001
Ethylenimine	0.20069	327.00	651.07	12.87	0.00000e+000	7.04974e-001
C2=diAmine	0.50998	390.40	1174.31	7.57	0.00000e+000	3.83220e+001
AllylAmine	0.32651	326.45	765.65	10.94	0.00000e+000	1.68716e+001
Pyrrole	0.34419	402.00	973.49	9.22	0.00000e+000	-1.44078e+001
Pyrrolidine	0.27399	359.60	868.41	9.96	0.00000e+000	-5.15448e+001
nMPyrrolidin	0.22698	352.30	814.79	10.54	0.00000e+000	-5.72892e+001
nMPyrrolidon	0.36111	475.15	1032.50	9.19	0.00000e+000	-5.56682e+001
Piperidine	0.25099	379.60	865.97	10.17	0.00000e+000	-5.30834e+001
CC6Amine	0.36037	407.65	870.57	10.36	0.00000e+000	-5.44357e+001
HPM-OX	0.95736	603.15	1141.26	9.01	-1.11214e-004	-2.84200e+001
THEED	1.85538	683.15	960.78	11.15	-2.20329e-004	-4.24298e-001
HxC1=imine	0.32964	404.85	882.57	10.20	0.00000e+000	-8.30865e+001
HxC1=diAmine	0.64178	475.04	700.96	13.54	0.00000e+000	2.16726e+001
Cumidine	0.31117	498.15	1017.45	9.48	-6.09416e-005	-2.00902e+001
Indole	0.84627	526.16	1108.95	8.86	-2.28366e-006	-4.78051e+001
UCARSOL	-1.40441	492.25	1052.81	9.12	3.88811e+004	-1.08555e+002

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
Methylamine	7.13968e-002	-1.77911e-005	1.18878e-009	-2.19524e-026	1.00000e+000	0.05133
Ethylamine	1.37690e-001	-5.28002e-005	9.52601e-009	-2.77697e-025	1.00000e+000	0.08054
diMethylamin	1.34837e-001	-4.43285e-005	5.85102e-009	2.13963e-025	1.00000e+000	0.09099
nPropylamine	1.75015e-001	-6.07735e-005	8.97053e-009	-3.64095e-025	1.00000e+000	-0.17426
iPropylamine	2.08887e-001	-9.42610e-005	2.08837e-008	1.79063e-025	1.00000e+000	0.10751
triMthylamin	1.98731e-001	-7.40140e-005	1.15622e-008	7.16253e-026	1.00000e+000	0.08995
n-Butylamine	2.23946e-001	-8.02817e-005	1.90098e-008	-2.06784e-025	1.00000e+000	0.02311
i-Butylamine	2.21647e-001	-7.03778e-005	5.83618e-009	-5.16960e-026	1.00000e+000	-0.11962
sec-Btylamin	2.18302e-001	-7.28082e-005	9.23484e-009	-6.64655e-026	1.00000e+000	-0.00196
trt-Btylamin	2.16975e-001	-7.32550e-005	1.00414e-008	-1.03391e-025	1.00000e+000	0.00607
diE-M-Amine	2.78769e-001	-7.33950e-005	-1.80263e-023	7.04151e-026	1.00000e+000	0.38775
B-M-Amine	2.77534e-001	-9.89385e-005	1.47005e-008	3.52076e-026	1.00000e+000	-0.00236
diPropylamin	3.14857e-001	-1.13075e-004	1.76910e-008	-1.02179e-025	1.00000e+000	-0.15157
di-iP-Amine	3.50374e-001	-1.34025e-004	2.15549e-008	5.61984e-025	1.00000e+000	-0.00305
triEthylamin	3.57989e-001	-1.46494e-004	2.73178e-008	7.15252e-026	1.00000e+000	0.00085
Caprolactam	9.84573e-002	2.95911e-004	-3.08997e-007	9.70469e-011	1.00000e+000	-0.11704
diButylamine	4.04314e-001	-1.46493e-004	2.31368e-008	-5.48122e-025	1.00000e+000	-0.03344
di-iB-Amine	4.57832e-001	-1.81954e-004	7.41664e-008	-5.74223e-025	1.00000e+000	-0.00936
triButylamin	5.99398e-001	-2.23576e-004	3.62480e-008	-3.93035e-025	1.00000e+000	-0.55905
Aniline	3.19462e-001	-1.71210e-004	4.08506e-008	7.52288e-026	1.00000e+000	-0.37198
n-M-Aniline	2.92300e-001	-1.08181e-004	1.34700e-008	1.40655e-025	1.00000e+000	-0.01519
nn-diM-Anili	4.06741e-001	-1.74853e-004	3.04879e-008	-3.05901e-026	1.00000e+000	0.04200
n-E-Aniline	3.37022e-001	-1.24885e-004	1.61872e-008	2.81429e-025	1.00000e+000	-0.01190
n-B-Aniline	4.57495e-001	-1.85450e-004	3.21957e-008	-3.46584e-025	1.00000e+000	-0.02318
Pentylamine	2.65078e-001	-9.14361e-005	1.32237e-008	-2.20035e-025	1.00000e+000	-0.01278
Hexylamine	2.44816e-001	-5.39413e-005	4.83064e-010	2.14573e-025	1.00000e+000	-0.01597
Pyridine	2.04482e-001	-7.55805e-005	5.46487e-009	2.77883e-012	1.00000e+000	-0.23589
2-M-Pyridine	2.79383e-001	-1.23546e-004	2.41730e-008	-2.35090e-025	1.00000e+000	-0.10677
3-M-Pyridine	2.80186e-001	-1.24046e-004	2.42279e-008	-4.70180e-027	1.00000e+000	-0.20036
4-M-Pyridine	2.44260e-001	-9.33252e-005	1.36360e-008	1.03440e-025	1.00000e+000	-0.08172
m-Toluidine	2.84226e-001	-1.01160e-004	1.16140e-008	7.57371e-026	1.00000e+000	-0.50010
o-Toluidine	2.97124e-001	-1.21833e-004	2.14613e-008	-2.59670e-025	1.00000e+000	-0.56879
p-Toluidine	2.94486e-001	-1.19455e-004	2.08220e-008	-5.40979e-027	1.00000e+000	-0.04561
Ethylenimine	1.04241e-001	-2.88076e-005	2.29310e-009	9.56735e-026	1.00000e+000	0.02503
C2=diAmine	1.20426e-001	-1.44693e-005	-9.87616e-009	-4.27824e-025	1.00000e+000	-0.30160
AllylAmine	1.36960e-001	-4.53969e-005	6.31466e-009	-3.28613e-025	1.00000e+000	-0.24830
Pyrrole	1.77858e-001	-6.96626e-005	1.18016e-008	-6.43574e-026	1.00000e+000	-0.01374
Pyrrolidine	2.67077e-001	-1.08069e-004	1.88321e-008	2.15448e-025	1.00000e+000	-0.19550
nMPyrrolidin	3.24962e-001	-1.32676e-004	2.32322e-008	1.97751e-025	1.00000e+000	-0.28514
nMPyrrolidon	3.23198e-001	-1.36657e-004	2.30013e-008	2.40762e-012	1.00000e+000	-0.59245
Piperidine	3.14659e-001	-1.12007e-004	1.60777e-008	-1.03175e-025	1.00000e+000	-0.25119
CC6Amine	3.74221e-001	-1.42577e-004	2.20088e-008	-5.00711e-026	1.00000e+000	-0.10275
HPM-OX	5.33672e-001	-2.75088e-004	6.54668e-008	1.36125e-018	1.00000e+000	-1.32131
THEED	5.48864e-001	-2.27872e-004	4.15287e-008	2.71240e-018	1.00000e+000	0.17793
HxC1=imine	4.01629e-001	-1.58456e-004	2.63514e-008	1.00142e-026	1.00000e+000	-0.14023
HxC1=diAmine	3.13816e-001	-9.26700e-005	6.66354e-009	-2.69880e-025	1.00000e+000	-0.48818
Cumidine	3.93673e-001	-1.58854e-004	2.67498e-008	7.57180e-019	1.00000e+000	-0.01723
Indole	3.55843e-001	-1.82649e-004	5.13121e-008	-5.91141e-012	1.00000e+000	-0.91693
UCARSOL	3.60696e-001	-9.38497e-005	-2.88216e-015	8.79502e-019	1.00000e+000	-1.07360

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
Methylamine	-0.09537	Amine	
Ethylamine	-0.10980	Amine	-1587370
diMethylamin	-0.03800	Amine	-1614560
nPropylamine	-0.61088	Amine	-2164800
iPropylamine	-0.28674	Amine	-2156500
triMthylamin	-0.05455	Amine	-2244880
n-Butylamine	-0.28992	Amine	-2776290
i-Butylamine	-0.63445	Amine	-2771500
sec-Btylamin	-0.24921	Amine	-2766450
trt-Btylamin	-0.26482	Amine	-2753620
diE-M-Amine	0.47722	Amine	
B-M-Amine	-0.33825	Amine	
diPropylamin	-0.50207	Amine	-4018900
di-iP-Amine	-0.33638	Amine	-3970000
triEthylamin	-0.22493	Amine	-4040530
Caprolactam	-0.95784	Amine	-3362100
diButylamine	-0.39853	Amine	-5239600
di-iB-Amine	-0.51007	Amine	
triButylamin	-1.10950	Amine	-7690010
Aniline	-0.92105	Amine	-3238500
n-M-Aniline	-0.39070	Amine	
nn-diM-Anili	-0.24232	Amine	-4525000
n-E-Aniline	-0.44339	Amine	
n-B-Aniline	-0.47947	Amine	
Pentylamine	-0.36287	Amine	-3386000
Hexylamine	-0.41949	Amine	-4000000
Pyridine	-0.52836	Amine	-2672070
2-M-Pyridine	-0.33974	Amine	-3263900
3-M-Pyridine	-0.43942	Amine	-3269120
4-M-Pyridine	-0.29383	Amine	-3265320
m-Toluidine	-0.99098	Amine	-3820000
o-Toluidine	-1.17630	Amine	-3820000
p-Toluidine	-0.37957	Amine	-3820000
Ethylenimine	-0.23206	Amine	-1480000
C2=diAmine	-0.32907	Amine	-1680000
AllylAmine	-0.60500	Amine	-2049990
Pyrrole	-0.46786	Amine	-2241800
Pyrrolidine	-0.61263	Amine	-2621400
nMPyrrolidin	-0.64411	Amine	-3256540
nMPyrrolidon	-0.84737	Amine	-2793700
Piperidine	-0.81638	Amine	-3211000
CC6Amine	-0.65942	Amine	-3785500
HPM-OX	-2.34928	Amine	-163880
THEED	-0.79512	Amine	-163880
HxC1=imine	-0.72402	Amine	-3853900
HxC1=diAmine	-1.06277	Amine	-4196890
Cumidine	-0.39391	Amine	
Indole	-1.40683	Amine	-4081100
UCARSOL	-1.98110	Amine	-163880

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
Nicotine	1079	162.240	754.60	35.01000	0.48449	0.53671	0.46290
Quinoline	1080	129.160	782.15	46.60000	0.46900	0.38158	0.32870
i-Quinoline	1081	129.160	803.15	49.80000	0.40300	0.37930	0.28850
Quinaldine	1082	143.188	772.00	29.60000	0.49000	0.42948	0.27950
C3=imine	1083	57.095	529.00	54.20000	0.20800	0.20093	0.25659
MethylEAmine	1084	75.111	630.00	52.20000	0.25300	0.26318	0.58549
12C3Diamine	1085	74.126	587.00	52.70000	0.31600	0.26838	0.47381
DMEthnlAmine	1086	89.137	571.82	41.40000	0.30000	0.33167	0.71096
DiC2=TrAmine	1087	103.166	676.00	42.20000	0.34200	0.37358	0.70022
MDEthnlAmine	1088	119.164	678.00	38.80000	0.36900	0.48713	1.30173
mPhynDiamine	1089	108.139	824.00	51.80000	0.37700	0.32859	0.54318
oPhnylDimine	1090	108.139	781.00	51.80000	0.31500	0.31646	0.49353
TriC2=TetraA	1091	146.235	718.00	31.70000	0.48200	0.57338	0.97347
BenzylAmine	1092	107.152	683.50	43.20000	0.37300	0.34939	0.40872
26MPyridine	1093	107.152	623.75	37.80000	0.31600	0.35754	0.35025
ToluenDiamin	1094	122.166	804.00	43.80000	0.37600	0.38183	0.57944
nMCC6Amine	1095	113.203	622.00	34.90000	0.39300	0.40347	0.38551
nC7Amine	1096	115.219	607.00	28.50000	0.47100	0.47304	0.51126
oEAniline	1097	121.180	704.00	37.40000	0.39900	0.40446	0.46312
246MPyridine	1098	121.180	653.00	33.30000	0.41700	0.41418	0.37585
nOctylAmine	1099	129.246	627.00	25.80000	0.52400	0.53952	0.56796
(C2=)4PAmine	1100	189.304	774.00	25.30000	0.63600	0.81844	1.23652
nNonylAmine	1101	143.272	648.00	23.60000	0.57700	0.60691	0.61355
nnDiEAniline	1102	149.235	702.00	28.50000	0.55600	0.51720	0.42618
26DEAniline	1103	149.235	678.00	31.20000	0.49500	0.61976	0.95382
nDecylAmine	1104	157.298	663.00	21.80000	0.62900	0.66837	0.66855
DiAmylAmine	1105	157.298	639.00	21.20000	0.62900	0.68673	0.67668
DiPhnylAmine	1106	169.225	817.00	31.80000	0.53900	0.53677	0.53008
12DiPHTriAzn	1107	197.240	845.00	28.26000	0.64200	0.67817	0.62268
DiCyHxAmine	1108	181.320	737.00	25.20000	0.61900	0.66723	0.51332
nC12Amine	1109	185.352	696.00	18.80000	0.73500	0.80488	0.76901
nC14Amine	1110	213.406	722.30	16.60000	0.88700	0.95547	0.85833
TriAmylAmine	1111	227.434	660.00	15.00000	0.89300	1.03971	0.85265
nnDiPHpPHDia	1112	260.338	906.00	23.10000	0.81700	0.90072	0.87606
F3-C2oicAcid	1113	114.024	491.30	32.60000	0.20397	0.22089	0.54000
C3oicAcid	1114	74.080	612.00	54.00000	0.23488	0.23855	0.51999
SuccinicAcid	1115	118.083	692.00	47.10000	0.31099	0.43845	0.98900
n-C4oicAcid	1116	88.107	627.00	52.70000	0.28999	0.31099	0.68300
i-C4oicAcid	1117	88.107	607.00	40.50000	0.29199	0.36107	0.62300
n-C5oicAcid	1118	102.134	650.00	38.10000	0.34000	0.36553	0.61365
i-C5oicAcid	1119	102.134	632.00	38.70000	0.34599	0.60575	0.64800
n-C6oicAcid	1120	116.160	667.00	33.50000	0.38899	0.43042	0.67005
1C12oicAcid	1121	200.320	734.00	19.30000	0.70500	0.86976	0.96710
1C16oicAcid	1122	256.428	775.00	15.00000	0.91700	1.19140	1.08299
LinoleicAcid	1123	280.450	775.00	13.00000	0.99000	1.09045	1.17620
AbieticAcid	1124	302.457	832.00	16.80000	0.93000	1.06633	1.12880
PerC2oicAcid	1125	76.052	557.00	64.00000	0.19799	0.21321	0.67356
AcrylicAcid	1126	72.063	615.00	56.60000	0.20800	0.32574	0.53728
FumaricAcid	1127	116.069	770.00	49.80000	0.29699	0.42787	0.98869

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
Nicotine	0.46290	518.65	1009.40	9.68	0.00000e+000	-4.83232e+001
Quinoline	0.32870	510.75	1096.39	8.87	-9.39954e-007	-2.38614e+001
i-Quinoline	0.28850	516.40	1096.43	8.90	-3.33238e-008	-2.06779e+001
Quinaldine	0.27950	519.75	1062.68	9.20	1.22422e-005	-6.63190e+001
C3=imine	0.25659	334.00	811.80	10.40	0.00000e+000	-4.04387e+001
MethylEAmine	0.58549	431.15	942.32	9.75	0.00000e+000	-1.11783e+001
12C3Diamine	0.47381	392.45	864.91	10.30	0.00000e+000	2.21081e+000
DMEthnlAmine	0.71096	407.15	891.11	10.12	0.00000e+000	-1.59939e+001
DiC2=TrAmine	0.70022	480.25	962.28	9.90	0.00000e+000	-1.10858e+001
MDEthnlAmine	1.30173	520.15	1041.94	9.39	0.00000e+000	-1.76084e+001
mPhynDiamine	0.54318	560.00	1106.58	9.06	0.00000e+000	-3.82438e+001
oPhnylDimine	0.49353	525.00	1080.65	9.08	0.00000e+000	-3.82438e+001
TriC2=TetraA	0.97347	539.65	985.43	10.05	0.00000e+000	-3.00996e+001
BenzylAmine	0.40872	457.65	985.44	9.51	0.00000e+000	-4.64336e+001
26MPyridine	0.35025	417.20	924.76	9.83	0.00000e+000	-1.19762e+001
ToluenDiamin	0.57944	557.15	1048.53	9.55	0.00000e+000	-4.43061e+001
nMCC6Amine	0.38551	422.00	873.19	10.45	0.00000e+000	-5.46952e+001
nC7Amine	0.51126	430.05	778.81	11.79	0.00000e+000	-3.18191e+000
oEAniline	0.46312	482.65	984.46	9.69	0.00000e+000	-4.86906e+001
246MPyridine	0.37585	444.00	920.50	10.08	0.00000e+000	-4.18879e+001
nOctylAmine	0.56796	452.75	785.90	11.89	0.00000e+000	-1.21987e+001
(C2=)4PAmine	1.23652	606.15	1001.19	10.28	0.00000e+000	-5.48548e+001
nNonylAmine	0.61355	475.35	792.26	11.98	0.00000e+000	-1.41707e+001
nnDiEAniline	0.42618	489.42	937.61	10.22	0.00000e+000	-1.06081e+002
26DEAniline	0.95382	508.65	909.27	10.68	0.00000e+000	-4.82799e+001
nDecylAmine	0.66855	493.65	790.83	12.16	0.00000e+000	-1.08617e+001
DiAmylAmine	0.67668	476.15	779.84	12.18	0.00000e+000	-3.72836e+001
DiPhnylAmine	0.53008	575.15	1059.46	9.55	0.00000e+000	-1.24526e+002
12DiPHTriAzn	0.62268	610.00	969.07	10.65	0.00000e+000	-1.99682e+002
DiCyHxAmine	0.51332	529.00	915.83	10.74	0.00000e+000	-1.22466e+002
nC12Amine	0.76901	532.35	788.33	12.51	0.00000e+000	-2.24467e+001
nC14Amine	0.85833	564.45	796.65	12.62	0.00000e+000	-2.52421e+001
TriAmylAmine	0.85265	516.15	793.28	12.30	0.00000e+000	-5.77978e+001
nnDiPHpPHDia	0.87606	688.00	1019.08	10.54	0.00000e+000	-1.95969e+002
F3-C2oicAcid	0.53350	346.00	1535.00	5.56	0.00000e+000	2.07604e+001
C3oicAcid	0.51999	414.50	997.86	9.09	0.00000e+000	5.67279e+000
SuccinicAcid	0.98900	507.00	1035.31	9.37	0.00000e+000	1.50777e+001
n-C4oicAcid	0.68300	437.20	961.25	9.61	0.00000e+000	1.17464e+001
i-C4oicAcid	0.62300	427.90	805.91	11.37	0.00000e+000	9.81944e+000
n-C5oicAcid	0.61365	459.50	939.00	10.00	0.00000e+000	1.33969e+001
i-C5oicAcid	1.99580	449.70	934.22	9.98	0.00000e+000	7.69278e+000
n-C6oicAcid	0.67005	478.85	928.47	10.25	0.00000e+000	9.94658e+000
1C12oicAcid	0.96710	571.85	893.32	11.30	3.27794e-005	-4.43270e+000
1C16oicAcid	1.08299	624.15	881.58	11.79	4.46359e-005	-5.60518e+001
LinoleicAcid	0.63120	627.00	908.78	11.46	1.47718e-004	-1.19831e+002
AbieticAcid	1.22187	649.70	1212.68	8.69	7.72194e-005	-2.59816e+002
PerC2oicAcid	0.67356	382.00	1160.55	7.61	0.00000e+000	-5.80469e+000
AcrylicAcid	0.53728	414.15	715.39	12.68	0.00000e+000	9.72640e+000
FumaricAcid	0.98869	563.15	1073.52	9.36	0.00000e+000	5.29192e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
Nicotine	4.19700e-001	-1.19490e-004	-1.25814e-021	2.37540e-025	1.00000e+000	-0.00176
Quinoline	3.10197e-001	-1.03913e-004	7.21572e-010	5.58403e-012	1.00000e+000	-0.16461
i-Quinoline	2.99813e-001	-9.12771e-005	-6.43988e-009	7.13348e-012	1.00000e+000	0.10480
Quinaldine	4.79578e-001	-2.71397e-004	8.75177e-008	-1.22203e-011	1.00000e+000	-0.30007
C3=imine	2.54740e-001	-1.58167e-004	6.00966e-008	-9.98519e-012	1.00000e+000	-0.51078
MethylEAmine	2.41665e-001	-1.27985e-004	4.48884e-008	-7.74165e-012	1.00000e+000	-0.55631
12C3Diamine	2.31907e-001	-1.09509e-004	3.25330e-008	-4.73986e-012	1.00000e+000	-0.60229
DMEthnlAmine	2.91423e-001	-1.30629e-004	2.67688e-008	-4.16920e-014	1.00000e+000	0.49019
DiC2=TrAmine	3.45394e-001	-1.83661e-004	6.31275e-008	-1.02788e-011	1.00000e+000	-0.22223
MDEthnlAmine	3.73628e-001	-1.87539e-004	5.49278e-008	-7.14056e-012	1.00000e+000	-0.53839
mPhynDiamine	3.83952e-001	-2.46927e-004	9.21961e-008	-1.49566e-011	1.00000e+000	-1.42347
oPhnylDimine	3.83952e-001	-2.46927e-004	9.21961e-008	-1.49566e-011	1.00000e+000	-0.38412
TriC2=TetraA	5.20227e-001	-2.88810e-004	1.02351e-007	-1.66864e-011	1.00000e+000	-0.53417
BenzylAmine	3.73549e-001	-2.19301e-004	7.88580e-008	-1.27247e-011	1.00000e+000	-0.19716
26MPyridine	2.60393e-001	-7.03844e-005	-8.30148e-009	6.37912e-012	1.00000e+000	0.00691
ToluenDiamin	4.46843e-001	-2.85124e-004	1.06261e-007	-1.63996e-011	1.00000e+000	-0.54347
nMCC6Amine	4.02376e-001	-1.21221e-004	-3.41315e-009	7.09440e-012	1.00000e+000	-0.26849
nC7Amine	3.78732e-001	-1.53786e-004	3.59996e-008	-4.38436e-012	1.00000e+000	-0.09679
oEAniline	4.45248e-001	-2.71026e-004	1.02061e-007	-1.76273e-011	1.00000e+000	-0.53685
246MPyridine	3.67185e-001	-1.41708e-004	1.82733e-008	1.95909e-012	1.00000e+000	0.38945
nOctylAmine	4.50288e-001	-2.02580e-004	5.50130e-008	-6.71668e-012	1.00000e+000	-0.09783
(C2=)4PAmine	7.08413e-001	-4.05783e-004	1.45875e-007	-2.38703e-011	1.00000e+000	0.24492
nNonylAmine	5.02074e-001	-2.29026e-004	6.44429e-008	-8.31943e-012	1.00000e+000	-0.06151
nnDiEAniline	6.23426e-001	-3.66226e-004	1.27236e-007	-1.94017e-011	1.00000e+000	-0.14857
26DEAniline	5.40608e-001	-3.10770e-004	1.08928e-007	-1.70729e-011	1.00000e+000	-0.38325
nDecylAmine	5.37203e-001	-2.29105e-004	5.60340e-008	-6.07466e-012	1.00000e+000	-0.04577
DiAmylAmine	5.94174e-001	-2.87816e-004	8.66751e-008	-1.22795e-011	1.00000e+000	-0.01351
DiPhnylAmine	6.68121e-001	-4.27190e-004	1.59796e-007	-2.58967e-011	1.00000e+000	-0.56883
12DiPHTriAzn	9.33253e-001	-6.93275e-004	2.88110e-007	-5.01700e-011	1.00000e+000	0.45038
DiCyHxAmine	7.13697e-001	-2.62470e-004	2.97559e-008	4.12046e-012	1.00000e+000	-0.24202
nC12Amine	6.63885e-001	-3.12305e-004	9.27277e-008	-1.30751e-011	1.00000e+000	-0.02163
nC14Amine	7.58392e-001	-3.43336e-004	9.33005e-008	-1.15433e-011	1.00000e+000	-0.00053
TriAmylAmine	8.70319e-001	-4.17919e-004	1.21135e-007	-1.61337e-011	1.00000e+000	0.06204
nnDiPHpPHDia	1.04671e+000	-6.84590e-004	2.59094e-007	-4.24739e-011	1.00000e+000	-0.41974
F3-C2oicAcid	1.59149e-001	-8.74966e-005	1.98807e-008	1.72702e-026	1.00000e+000	0.11270
C3oicAcid	1.84572e-001	-9.55610e-005	2.47084e-008	-3.74008e-026	1.00000e+000	0.04146
SuccinicAcid	2.34593e-001	-1.04830e-004	1.98561e-008	4.76933e-026	1.00000e+000	0.01745
n-C4oicAcid	2.06985e-001	-8.10514e-005	1.38362e-008	-8.45171e-026	1.00000e+000	-0.06999
i-C4oicAcid	2.33553e-001	-1.24082e-004	3.37719e-008	1.69034e-025	1.00000e+000	0.13118
n-C5oicAcid	2.51817e-001	-9.77608e-005	1.65581e-008	-1.75319e-025	1.00000e+000	-0.02439
i-C5oicAcid	2.60198e-001	-1.02854e-004	1.73410e-008	-2.57823e-025	1.00000e+000	-0.06389
n-C6oicAcid	3.04992e-001	-1.21443e-004	2.09861e-008	1.87667e-025	1.00000e+000	0.07202
1C12oicAcid	6.18983e-001	-2.74394e-004	6.94027e-008	-7.81729e-012	1.00000e+000	0.35686
1C16oicAcid	9.06047e-001	-4.50485e-004	1.36436e-007	-1.88659e-011	1.00000e+000	0.42823
LinoleicAcid	1.11167e+000	-6.73052e-004	2.46866e-007	-3.77068e-011	1.00000e+000	0.11021
AbieticAcid	1.36411e+000	-7.82553e-004	2.55750e-007	-3.63587e-011	1.00000e+000	-0.67495
PerC2oicAcid	1.69314e-001	-9.12267e-005	2.28431e-008	-1.76624e-025	1.00000e+000	-0.03887
AcrylicAcid	1.39929e-001	-5.87828e-005	1.05531e-008	1.41893e-025	1.00000e+000	0.04637
FumaricAcid	1.90202e-001	-9.07764e-005	1.88994e-008	2.92999e-026	1.00000e+000	-0.16986

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
Nicotine	-0.45737	Amine	
Quinoline	-0.52735	Amine	-4544100
i-Quinoline	-0.25243	Amine	-4533000
Quinaldine	-0.77521	Amine	-5232000
C3=imine	-0.45736	Amine	-2080000
MethylEAmine	-1.71105	Amine	-2009990
12C3Diamine	-1.36202	Amine	-2289990
DMEthnlAmine	0.45002	Amine	-2649990
DiC2=TrAmine	-0.89006	Amine	-3080000
MDEthnlAmine	-1.91559	Amine	-3060000
mPhynDiamine	-2.19195	Amine	-3320000
oPhnylDimine	-1.08835	Amine	-3329990
TriC2=TetraA	-1.72201	Amine	-4450000
BenzylAmine	-0.52880	Amine	-3849990
26MPyridine	-0.27786	Amine	-3855600
ToluenDiamin	-0.73403	Amine	-4022000
nMCC6Amine	-0.89843	Amine	-4419990
nC7Amine	-0.62250	Amine	-4610000
oEAniline	-1.15366	Amine	-4450000
246MPyridine	0.45949	Amine	-4450000
nOctylAmine	-0.61470	Amine	-5219990
(C2=)4PAmine	-0.78413	Amine	-5830000
nNonylAmine	-0.75316	Amine	-5830000
nnDiEAniline	-0.52102	Amine	-5730000
26DEAniline	-1.11783	Amine	-5650000
nDecylAmine	-0.76361	Amine	-6440000
DiAmylAmine	-0.49705	Amine	-6450000
DiPhnylAmine	-1.05253	Amine	-6179990
12DiPHTriAzn	0.43668	Amine	-6384000
DiCyHxAmine	-0.85587	Amine	-7260000
nC12Amine	-0.76627	Amine	-7660000
nC14Amine	-0.77583	Amine	-8830000
TriAmylAmine	-0.50575	Amine	-9529990
nnDiPHpPHDia	-1.44817	Amine	-9340000
F3-C2oicAcid	-0.51146	CarbAcid	150000
C3oicAcid	-0.28966	CarbAcid	-1395020
SuccinicAcid	-0.64630	CarbAcid	-1359000
n-C4oicAcid	-0.48201	CarbAcid	-2006220
i-C4oicAcid	-0.31999	CarbAcid	-2000140
n-C5oicAcid	-0.54935	CarbAcid	
i-C5oicAcid	-0.58143	CarbAcid	-2615300
n-C6oicAcid	-0.47530	CarbAcid	-3228500
1C12oicAcid	-0.48205	CarbAcid	-6849800
1C16oicAcid	-0.44861	CarbAcid	-9274680
LinoleicAcid	-0.85115	CarbAcid	-10400000
AbieticAcid	-1.37931	CarbAcid	-10900000
PerC2oicAcid	-0.52682	CarbAcid	-882623
AcrylicAcid	-0.37016	CarbAcid	-1280210
FumaricAcid	-0.46481	CarbAcid	-1247030

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
MaleicAcid	1128	116.069	562.00	49.80000	0.29699	0.47483	0.98614
ci-CrotoAcid	1129	86.090	647.00	47.00000	0.27000	0.27647	0.57226
tr-CrotoAcid	1130	86.090	665.00	47.00000	0.27000	0.29587	0.57077
m-AcrylAcid	1131	86.090	642.00	47.00000	0.27000	0.27092	0.46783
AdipicAcid	1132	146.143	809.00	35.20000	0.40000	0.48440	1.05065
StearicAcid	1133	284.483	799.00	13.50000	1.01997	1.33203	1.08410
i-PhthalAcid	1134	166.132	1390.00	39.50000	0.42399	0.60527	1.07939
PhthalAcid	1135	166.132	1390.00	39.50000	0.42399	0.53522	1.09238
SoyBeanOil	1136	277.790	965.90	13.19400	1.02750	1.23432	0.95424
T-PhthalAcid	1137	166.132	1390.00	39.50000	0.42399	0.86580	1.09238
ThioAcetAcid	1138	76.110	577.30	69.20000	0.21950	0.21196	0.30400
o-ToluicAcid	1139	136.149	750.00	38.60000	0.39700	0.43033	0.65720
p-ToluicAcid	1140	136.149	772.00	38.60000	0.39700	0.44369	0.66100
PyruvicAcid	1141	88.063	634.52	56.50000	0.23900	0.23418	0.66948
MalonicAcid	1142	104.058	805.00	56.40000	0.25800	0.26111	0.94180
LacticAcid	1143	90.078	627.00	59.60000	0.25100	0.25550	1.02959
MalicAcid	1144	134.089	781.00	50.70000	0.33100	0.43849	1.52980
CitracoAcid	1145	130.100	829.00	42.40000	0.34000	0.35045	0.92687
GluricAcid	1146	132.115	807.00	40.40000	0.36300	0.38642	0.95896
2MC4oicAcid	1147	102.133	643.00	38.90000	0.34700	0.36129	0.58944
NeoC5oicAcid	1148	102.133	632.00	38.90000	0.33600	0.35796	0.50927
2EC4oicAcid	1149	116.160	655.00	34.10000	0.38900	0.42376	0.63258
HyCaproAcid	1150	132.158	758.00	36.40000	0.40200	0.45070	1.16284
SalicylAcid	1151	138.123	739.00	51.80000	0.32600	0.38177	0.85118
PimelicAcid	1152	160.169	805.00	31.40000	0.46900	0.50173	1.11582
AzelaicAcid	1153	188.223	811.00	25.60000	0.61000	0.68426	1.17192
nC9oicAcid	1154	158.240	712.00	23.50000	0.54700	0.61993	0.72740
nC10oicAcid	1155	172.268	726.00	21.00000	0.60000	0.66549	0.72724
nC13oicAcid	1156	214.348	744.00	18.10000	0.75800	0.92290	1.00415
nC14oicAcid	1157	228.375	756.00	17.00000	0.81100	0.96306	1.02541
C15oicAcid	1158	242.401	766.00	16.00000	0.86400	1.07167	1.03980
nC17oicAcid	1159	270.454	787.00	14.30000	0.96900	1.18464	1.06629
LinolenicAcid	1160	278.433	780.00	14.40000	1.07000	1.28979	1.18549
C19oicAcid	1161	298.510	810.00	13.00000	1.08000	1.33840	1.07000
nC20oicAcid	1162	312.536	821.00	12.40000	1.12996	1.44491	1.08554
E-Formate	1163	74.080	508.50	47.30000	0.22900	0.22605	0.28499
n-P-Formate	1164	88.107	537.00	40.60000	0.28499	0.28231	0.31400
i-B-Formate	1165	102.134	552.00	38.70000	0.35199	0.34749	0.39599
n-B-Formate	1166	102.133	557.00	35.10000	0.33599	0.34259	0.38440
nPentylForma	1167	116.160	576.00	34.60000	0.40099	0.40786	0.53798
iPentylForma	1168	116.160	577.00	30.50000	0.41299	0.40072	0.38411
M-Acetate	1169	74.080	506.80	46.90000	0.22800	0.22619	0.32600
AllylAcetate	1170	100.111	557.00	36.70000	0.32300	0.32326	0.38784
E-Acetate	1171	88.107	523.20	38.20000	0.28600	0.28529	0.36199
i-P-Acetate	1172	102.133	537.00	35.70000	0.33599	0.34147	0.35499
n-P-Acetate	1173	102.134	549.40	33.20000	0.34498	0.34279	0.38850
i-B-Acetate	1174	116.160	562.00	30.10000	0.41400	0.40641	0.45500
n-B-Acetate	1175	116.160	577.00	31.30000	0.41280	0.40268	0.41479
sec-B-Acetate	1176	116.160	561.00	31.60000	0.38899	0.40086	0.40560

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
MaleicAcid	0.98614	411.00	874.46	10.34	0.00000e+000	1.22577e+001
ci-CrotoAcid	0.57226	445.05	1032.18	9.00	0.00000e+000	1.86210e+001
tr-CrotoAcid	0.57077	458.15	971.96	9.65	0.00000e+000	6.71290e+000
m-AcrylAcid	0.46783	434.15	1021.03	9.02	0.00000e+000	-1.73831e+001
AdipicAcid	1.10450	611.00	1091.06	9.46	0.00000e+000	1.31656e+001
StearicAcid	1.08410	648.35	881.67	11.94	6.79712e-005	8.89860e+000
i-PhthalAcid	1.07939	1040.00	2000.18	6.16	0.00000e+000	-5.34696e+001
PhthalAcid	1.09238	1040.00	2184.62	5.64	0.00000e+000	-5.34696e+001
SoyBeanOil	0.95424	777.07	924.42	12.10	-1.37582e-004	-1.47580e+001
T-PhthalAcid	1.09238	1040.00	854.68	14.42	0.00000e+000	-5.34696e+001
ThioAcetAcid	0.30400	360.20	1069.51	8.09	-2.00057e-007	3.84649e+001
o-ToluicAcid	0.78150	532.00	1152.43	8.55	-6.33151e-005	4.52192e+000
pToluicAcid	1.03302	548.15	1206.33	8.25	-6.33151e-005	4.52192e+000
PyruvicAcid	0.66948	438.15	1274.92	7.25	0.00000e+000	3.20711e+000
MalonicAcid	0.94180	580.00	1408.30	7.20	0.00000e+000	-2.47202e+001
LacticAcid	1.02959	455.00	1220.90	7.66	0.00000e+000	3.40129e+000
MalicAcid	1.52980	602.00	1220.21	8.42	0.00000e+000	9.76018e+000
CitracoAcid	0.92687	607.00	1380.53	7.46	0.00000e+000	-5.35656e+001
GluricAcid	0.95896	595.54	1209.31	8.46	0.00000e+000	-9.23151e+000
2MC4oicAcid	0.58944	450.15	940.03	9.92	0.00000e+000	-1.84015e+001
NeoC5oicAcid	0.50927	436.95	908.21	10.16	0.00000e+000	-4.04858e+001
2EC4oicAcid	0.63258	466.95	927.88	10.17	0.00000e+000	-4.62428e+001
HyCaproAcid	1.16284	576.00	1134.16	8.92	0.00000e+000	-3.74120e+000
SalicylAcid	0.85118	529.00	1154.93	8.52	0.00000e+000	9.52857e+000
PimelicAcid	1.11582	615.25	1206.83	8.57	0.00000e+000	1.86666e+001
AzelaicAcid	1.17192	633.36	1046.44	9.98	0.00000e+000	-2.40045e+001
nC9oicAcid	0.72740	528.75	909.38	10.82	0.00000e+000	1.22272e+001
nC10oicAcid	0.72724	543.15	886.91	11.19	0.00000e+000	1.22226e+001
nC13oicAcid	1.00415	585.25	874.83	11.63	0.00000e+000	-1.58688e+001
nC14oicAcid	1.02541	599.35	859.61	11.93	0.00000e+000	-4.98008e+001
C15oicAcid	1.03980	612.05	862.93	11.97	0.00000e+000	-1.53147e+001
nC17oicAcid	1.06629	635.75	853.69	12.25	0.00000e+000	-1.79940e+001
LinolencAcid	1.18549	632.00	918.84	11.36	0.00000e+000	-9.10131e+001
C19oicAcid	1.07000	659.15	848.12	12.48	0.00000e+000	-2.61717e+001
nC20oicAcid	1.08554	670.15	841.46	12.65	0.00000e+000	-1.19627e+001
E-Formate	0.28499	327.50	928.96	9.03	0.00000e+000	2.46864e+001
n-P-Formate	0.31400	354.10	910.15	9.46	0.00000e+000	3.79212e+001
i-B-Formate	0.39599	371.40	884.38	9.89	0.00000e+000	1.98620e+001
n-B-Formate	0.38440	379.25	897.14	9.82	0.00000e+000	-2.62050e+001
nPentylForma	0.53798	403.60	902.00	9.97	0.00000e+000	-2.75879e+001
iPentylForma	0.38411	396.70	882.00	10.13	0.00000e+000	-2.75879e+001
M-Acetate	0.32049	330.40	939.33	8.95	0.00000e+000	1.65606e+001
AllylAcetate	0.38784	377.15	932.73	9.42	0.00000e+000	-3.71890e+000
E-Acetate	0.35949	350.30	904.86	9.48	0.00000e+000	7.23976e+000
i-P-Acetate	0.35499	361.65	881.34	9.83	4.01764e+004	-5.07969e+001
n-P-Acetate	0.39100	374.70	892.75	9.82	0.00000e+000	1.54294e+001
i-B-Acetate	0.45500	389.70	878.87	10.11	0.00000e+000	7.31454e+000
n-B-Acetate	0.41699	399.30	885.84	10.11	0.00000e+000	1.36275e+001
sec-B-Acetat	0.40560	385.15	877.94	10.08	0.00000e+000	-3.67181e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
MaleicAcid	2.12014e-001	-1.03747e-004	2.27064e-008	-1.75800e-025	1.00000e+000	0.23454
ci-CrotoAcid	1.84082e-001	-7.63091e-005	1.41316e-008	2.21669e-025	1.00000e+000	-0.17519
tr-CrotoAcid	1.89117e-001	-7.99964e-005	1.50709e-008	-4.78110e-026	1.00000e+000	-0.15963
m-AcrylAcid	2.36861e-001	-1.20911e-004	2.79459e-008	4.34645e-027	1.00000e+000	-0.14508
AdipicAcid	3.22033e-001	-1.34244e-004	2.29734e-008	-2.43485e-025	1.00000e+000	0.15342
StearicAcid	8.45987e-001	-3.04488e-004	4.08088e-008	1.46247e-012	1.00000e+000	0.26585
i-PhthalAcid	3.59995e-001	-1.53767e-004	2.64432e-008	1.17425e-025	1.00000e+000	-0.04407
PhthalAcid	3.59995e-001	-1.53767e-004	2.64432e-008	1.17425e-025	1.00000e+000	-0.05493
SoyBeanOil	8.33751e-001	-2.10594e-004	-5.40666e-015	1.64303e-018	1.00000e+000	-0.18484
T-PhthalAcid	3.59995e-001	-1.53767e-004	2.64432e-008	1.17425e-025	1.00000e+000	0.65347
ThioAcetAcid	8.15374e-002	-2.33507e-005	1.20048e-009	3.57789e-021	1.00000e+000	0.40437
o-ToluicAcid	1.66248e-001	1.56950e-004	-2.15897e-007	7.36754e-011	1.00000e+000	0.61373
pToluicAcid	1.66248e-001	1.56950e-004	-2.15897e-007	7.36754e-011	1.00000e+000	-0.12631
PyruvicAcid	1.94408e-001	-1.21866e-004	4.69589e-008	-8.00249e-012	1.00000e+000	-0.37906
MalonicAcid	2.82895e-001	-2.05030e-004	8.71175e-008	-1.59422e-011	1.00000e+000	-0.29577
LacticAcid	2.17935e-001	-1.24677e-004	4.35934e-008	-6.92161e-012	1.00000e+000	-0.82790
MalicAcid	3.06084e-001	-2.02642e-004	8.09021e-008	-1.43562e-011	1.00000e+000	-0.09558
CitracoAcid	5.22516e-001	-4.97060e-004	2.76486e-007	-6.41448e-011	1.00000e+000	-0.61792
GluricAcid	3.99513e-001	-3.40483e-004	1.95517e-007	-5.04015e-011	1.00000e+000	-0.27242
2MC4oicAcid	3.01786e-001	-1.39091e-004	3.43574e-008	-3.54191e-012	1.00000e+000	-0.05386
NeoC5oicAcid	3.68299e-001	-2.26198e-004	8.64776e-008	-1.49241e-011	1.00000e+000	-0.05571
2EC4oicAcid	4.35365e-001	-2.83907e-004	1.23280e-007	-2.51942e-011	1.00000e+000	-0.06651
HyCaproAcid	3.72999e-001	-1.93801e-004	6.05503e-008	-8.75505e-012	1.00000e+000	-0.86918
SalicylAcid	1.57674e-001	1.54062e-004	-2.31130e-007	8.44042e-011	1.00000e+000	0.53535
PimelicAcid	3.87745e-001	-1.96606e-004	6.00911e-008	-8.77542e-012	1.00000e+000	-0.37125
AzelaicAcid	6.25162e-001	-4.65052e-004	2.43250e-007	-5.99686e-011	1.00000e+000	-0.25893
nC9oicAcid	4.38080e-001	-1.75662e-004	4.12116e-008	-6.53136e-012	1.00000e+000	0.08891
nC10oicAcid	4.82414e-001	-1.89331e-004	4.17197e-008	-6.13295e-012	1.00000e+000	-0.08891
nC13oicAcid	6.99578e-001	-3.39442e-004	1.02232e-007	-1.46132e-011	1.00000e+000	-0.07338
nC14oicAcid	7.96577e-001	-3.92896e-004	1.16991e-007	-1.59256e-011	1.00000e+000	-0.07005
C15oicAcid	7.86128e-001	-3.63119e-004	1.00148e-007	-1.28502e-011	1.00000e+000	-0.07576
nC17oicAcid	8.83919e-001	-4.04524e-004	1.10369e-007	-1.39622e-011	1.00000e+000	0.06030
LinolencAcid	9.90787e-001	-5.35844e-004	1.77775e-007	-2.64745e-011	1.00000e+000	0.01865
C19oicAcid	9.95215e-001	-4.58571e-004	1.24532e-007	-1.53381e-011	1.00000e+000	-0.09407
nC20oicAcid	9.97459e-001	-4.20333e-004	1.00643e-007	-1.29830e-011	1.00000e+000	0.22815
E-Formate	1.15873e-001	-7.07129e-006	-1.34060e-008	1.57084e-025	1.00000e+000	0.03716
n-P-Formate	1.83364e-001	-3.73974e-005	-2.58922e-009	-8.89653e-026	1.00000e+000	0.00557
i-B-Formate	2.01834e-001	-4.78967e-005	-1.85166e-009	-4.02203e-025	1.00000e+000	-0.02209
n-B-Formate	3.47787e-001	-2.11958e-004	8.04786e-008	-1.34022e-011	1.00000e+000	-0.00622
nPentylForma	3.94012e-001	-2.11611e-004	5.31515e-008	-1.05563e-025	1.00000e+000	-0.01452
iPentylForma	3.94012e-001	-2.11611e-004	5.31515e-008	-1.05563e-025	1.00000e+000	-0.01282
M-Acetate	1.12324e-001	-1.44826e-005	7.28961e-009	-5.23612e-026	1.00000e+000	-0.00413
AllylAcetate	2.54256e-001	-1.06249e-004	1.80383e-008	-2.12281e-025	1.00000e+000	-0.01101
E-Acetate	2.03734e-001	-6.97782e-005	7.14197e-009	1.91276e-025	1.00000e+000	0.03730
i-P-Acetate	4.12769e-001	-2.85915e-004	1.19921e-007	-2.15145e-011	1.00000e+000	-0.01461
n-P-Acetate	2.25197e-001	-5.62351e-005	-3.59982e-009	3.14543e-025	1.00000e+000	-0.00306
i-B-Acetate	2.87188e-001	-8.59210e-005	2.75428e-009	1.75937e-025	1.00000e+000	-0.00714
n-B-Acetate	2.74630e-001	-7.59803e-005	1.97877e-010	-2.69771e-025	1.00000e+000	-0.30671
sec-B-Acetat	4.10974e-001	-2.21740e-004	5.54665e-008	1.64208e-025	1.00000e+000	-0.06132

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
MaleicAcid	-0.95569	CarbAcid	-1268370
ci-CrotoAcid	-0.55667	CarbAcid	-1950000
tr-CrotoAcid	-0.49448	CarbAcid	-1880000
m-AcrylAcid	-0.43998	CarbAcid	-1930000
AdipicAcid	-0.81892	CarbAcid	-2580000
StearicAcid	-0.66161	CarbAcid	-10489000
i-PhthalAcid	-0.90232	CarbAcid	-3070500
PhthalAcid	-0.84232	CarbAcid	-3091500
SoyBeanOil	-0.76786	CarbAcid	
T-PhthalAcid	0.47070	CarbAcid	-3057500
ThioAcetAcid	0.49811	CarbAcid	
o-ToluicAcid	0.02963	CarbAcid	-3698000
pToluicAcid	-0.82965	CarbAcid	-3692000
PyruvicAcid	-0.94547	CarbAcid	-986999
MalonicAcid	-0.14530	CarbAcid	-773630
LacticAcid	-2.42143	CarbAcid	-1235000
MalicAcid	0.74182	CarbAcid	-1190000
CitracoAcid	-1.07972	CarbAcid	-1870000
GluricAcid	-0.73358	CarbAcid	-1975270
2MC4oicAcid	-0.53541	CarbAcid	-2680000
NeoC5oicAcid	-0.57424	CarbAcid	-2569000
2EC4oicAcid	-0.63225	CarbAcid	-3295900
HyCaproAcid	-1.81444	CarbAcid	-3129990
SalicylAcid	0.45712	CarbAcid	-2890100
PimelicAcid	-1.06164	CarbAcid	-3196400
AzelaicAcid	-1.09388	CarbAcid	-4422390
nC9oicAcid	-0.58629	CarbAcid	-5060600
nC10oicAcid	-0.79206	CarbAcid	-5720000
nC13oicAcid	-0.88056	CarbAcid	-7452600
nC14oicAcid	-0.89078	CarbAcid	-8060000
C15oicAcid	-0.92046	CarbAcid	-8668900
nC17oicAcid	-0.77564	CarbAcid	-9876130
LinolenicAcid	-0.72552	CarbAcid	-10200000
C19oicAcid	-1.00899	CarbAcid	-11088000
nC20oicAcid	-0.62434	CarbAcid	-11694800
E-Formate	-0.18353	Ester	-1506960
n-P-Formate	-0.26675	Ester	-2029990
i-B-Formate	-0.35199	Ester	-2700770
n-B-Formate	-0.38023	Ester	-2803900
nPentylForma	-0.48653	Ester	
iPentylForma	-0.34854	Ester	
M-Acetate	-0.21626	Ester	-1450000
AllylAcetate	-0.36125	Ester	-2561720
E-Acetate	-0.22010	Ester	-2063000
i-P-Acetate	-0.35938	Ester	-2658000
n-P-Acetate	-0.31521	Ester	-2671000
i-B-Acetate	-0.36307	Ester	-3276000
n-B-Acetate	-0.65684	Ester	-3283000
sec-B-Acetate	-0.44795	Ester	-3267000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
iPentylAceta	1177	130.186	597.00	28.30000	0.46000	0.46015	0.40500
nPentylAceta	1178	130.186	597.00	27.00000	0.44200	0.46761	0.48958
BZ-Acetate	1179	150.177	699.00	31.80000	0.44900	0.46808	0.46985
M-C3oate	1180	88.107	530.60	40.00000	0.28200	0.28047	0.34999
E-C3oate	1181	102.134	546.00	33.60000	0.34498	0.34123	0.39100
Vinyl-C3oate	1182	100.111	546.00	36.70000	0.32300	0.35826	0.33572
n-P-C3oate	1183	116.160	577.00	30.10000	0.41299	0.39789	0.36340
i-B-C3oate	1184	130.186	582.00	27.60000	0.46000	0.45640	0.45974
n-B-C3oate	1185	130.186	592.00	27.00000	0.44200	0.46489	0.47536
i-PentC3oate	1186	144.214	611.00	24.60000	0.52398	0.52256	0.45199
M-C4oate	1187	102.134	554.40	34.70000	0.34000	0.33906	0.37999
M-i-C4oate	1188	102.134	540.80	34.20000	0.33899	0.35043	0.36199
E-C4oate	1189	116.160	567.00	30.60000	0.42100	0.40625	0.46099
E-i-C4oate	1190	116.160	555.00	29.60000	0.42100	0.40617	0.43099
n-P-C4oate	1191	130.186	590.00	27.10000	0.46000	0.46118	0.44644
n-P-i-C4oate	1192	130.186	581.00	28.30000	0.46000	0.45642	0.44732
i-B-C4oate	1193	144.214	602.00	24.50000	0.52398	0.52832	0.47725
i-B-i-C4oate	1194	144.214	601.90	24.60000	0.52398	0.51826	0.39493
n-B-C4oate	1195	144.214	616.00	25.30000	0.49399	0.63124	0.48521
E-i-C5-oate	1196	130.186	587.95	28.30000	0.44200	0.45873	0.40738
nPiC5-oate	1197	144.214	607.00	24.60000	0.52398	0.52144	0.41800
M-BZoate	1198	136.151	692.00	36.20000	0.39599	0.40639	0.43000
E-BZoate	1199	150.177	668.70	23.20000	0.43099	0.46566	0.55097
PhenylBZoate	1200	198.231	722.00	26.00000	0.56098	0.60613	0.57999
betaPLactone	1201	72.063	685.00	69.00000	0.19494	0.17889	0.34474
gamaBLactone	1202	86.090	739.00	59.20000	0.26499	0.24592	0.36901
Caprolactone	1203	114.138	732.00	46.20000	0.33100	0.32855	0.41830
Di-E-Oxalate	1204	146.143	645.00	30.80000	0.41600	0.44628	0.56822
EGly-DiAceta	1205	146.143	652.00	30.80000	0.41600	0.43562	0.55952
di-E-Malonat	1206	160.169	652.00	27.80000	0.46900	0.50801	0.61084
M-Acrylate	1207	86.090	536.00	42.50000	0.27000	0.26399	0.34755
E-Acrylate	1208	100.115	553.00	36.80000	0.32300	0.32297	0.37180
n-B-Acrylate	1209	128.171	597.00	26.30000	0.42800	0.44260	0.43810
nBMAcrylate	1210	142.197	616.00	26.30000	0.48100	0.50163	0.46550
M-Caprate	1211	186.294	682.00	22.50000	0.59249	0.73629	0.65900
M-Caproate	1212	130.186	605.00	30.00000	0.41677	0.46598	0.47900
M-Myristate	1213	242.401	739.00	18.50000	0.73964	1.06421	0.84400
M-Palmitate	1214	270.454	763.00	16.50000	0.83714	1.18692	0.92400
M-Stearate	1215	298.507	785.00	15.00000	0.92928	1.39899	0.99400
M-Oleate	1216	296.500	764.00	12.80000	1.05999	1.22762	1.04900
M-Linoleate	1217	294.459	749.58	21.05100	0.71518	1.14016	0.56992
M-Caprylate	1218	158.240	647.00	25.50000	0.51087	0.59608	0.56200
M-Laureate	1219	214.347	712.00	20.25000	0.75800	0.87061	0.75600
M-Arachidate	1220	326.559	752.95	14.73600	0.99745	1.41090	0.66348
MMethAcryl	1221	100.111	562.00	36.70000	0.32300	0.31119	0.31674
EMethaAcryla	1222	114.138	577.00	32.50000	0.37500	0.37430	0.34371
M-Salicylate	1223	152.149	700.00	40.70000	0.41000	0.44479	0.63150
M-p-Toluate	1224	150.179	710.90	32.24600	0.45750	0.47544	0.48766
MTerephllate	1225	180.160	743.03	34.43900	0.39550	0.65314	0.73145

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
iPentylAceta	0.40500	415.70	875.37	10.37	0.00000e+000	-5.92611e+001
nPentylAceta	0.48958	422.15	880.84	10.36	0.00000e+000	-1.51872e+001
BZ-Acetate	0.46985	486.65	1054.39	9.08	0.00000e+000	-6.93516e+001
M-C3oate	0.34999	352.80	919.84	9.34	0.00000e+000	1.82115e+001
E-C3oate	0.39100	372.20	894.90	9.78	0.00000e+000	1.98620e+001
Vinyl-C3oate	0.33572	364.35	823.71	10.55	0.00000e+000	-6.53907e+000
n-P-C3oate	0.37617	395.80	886.42	10.08	0.00000e+000	-2.75879e+001
i-B-C3oate	0.45974	410.00	888.00	10.18	0.00000e+000	-3.09191e+001
n-B-C3oate	0.47536	419.75	880.71	10.34	0.00000e+000	1.56872e+001
i-PentC3oate	0.45199	433.40	870.00	10.58	0.00000e+000	9.30026e+000
M-C4oate	0.37999	375.90	902.86	9.72	0.00000e+000	-7.64617e+000
M-i-C4oate	0.36199	365.50	862.00	10.09	0.00000e+000	4.34540e+000
E-C4oate	0.46099	394.70	883.28	10.10	0.00000e+000	2.15233e+001
E-i-C4oate	0.43099	383.20	869.00	10.17	0.00000e+000	-2.75879e+001
n-P-C4oate	0.44644	416.20	879.00	10.33	0.00000e+000	1.35459e+001
n-P-i-C4oate	0.44732	408.60	884.00	10.21	0.00000e+000	1.35459e+001
i-B-C4oate	0.47725	430.10	863.00	10.64	0.00000e+000	9.30026e+000
i-B-i-C4oate	0.39493	421.80	859.95	10.61	0.00000e+000	-3.54262e+001
n-B-C4oate	0.48521	438.15	728.60	12.68	0.00000e+000	2.48047e+001
E-i-C5-oate	0.40738	407.45	873.55	10.32	0.00000e+000	-2.23125e+001
nPiC5-oate	0.41800	429.10	863.00	10.63	0.00000e+000	9.30026e+000
M-BZoate	0.43000	472.20	1086.00	8.72	0.00000e+000	-2.12219e+001
E-BZoate	0.47999	485.90	1050.93	9.10	0.00000e+000	2.06824e+001
PhenylBZoate	0.57999	523.00	1004.97	9.75	0.00000e+000	-1.93313e+001
betaPLactone	0.34474	435.15	1272.63	7.24	0.00000e+000	1.74391e+000
gamaBLactone	0.36901	477.15	1132.93	8.39	0.00000e+000	7.66373e+000
Caprolactone	0.41830	488.15	1137.43	8.42	0.00000e+000	-6.21229e+001
Di-E-Oxalate	0.56822	458.85	1083.79	8.66	0.00000e+000	-7.75543e+000
EGly-DiAceta	0.55952	463.65	1110.93	8.48	0.00000e+000	-7.75119e+000
di-E-Malonat	0.61084	472.05	1059.67	8.94	0.00000e+000	-2.56429e+001
M-Acrylate	0.33730	353.35	960.77	8.95	0.00000e+000	4.60394e+000
E-Acrylate	0.37180	372.65	926.29	9.45	0.00000e+000	-1.44463e+001
n-B-Acrylate	0.43810	421.00	903.53	10.09	2.35828e-005	3.19350e+001
nBMAcrylate	0.46550	432.00	899.13	10.23	1.64454e-005	-4.44671e+001
M-Caprate	0.65900	505.13	873.00	11.10	2.69276e+004	-3.86818e+001
M-Caproate	0.47900	424.14	884.60	10.33	3.23300e+004	-5.81671e+001
M-Myristate	0.84400	570.12	850.00	11.87	1.46112e+004	1.19712e+000
M-Palmitate	0.92400	599.30	880.00	11.65	1.88949e+004	-1.44131e+001
M-Stearate	0.99400	625.63	849.80	12.24	5.95312e+003	2.86004e+001
M-Oleate	0.73209	617.00	876.88	11.81	3.24214e-005	-4.53642e+001
M-Linoleate	0.56992	551.32	888.60	11.23	3.50760e+004	-5.07514e+001
M-Caprylate	0.56200	466.85	877.50	10.75	3.00430e+004	-4.92800e+001
M-Laureate	1.25550	539.31	1047.27	9.46	1.67941e-005	-2.99213e+001
M-Arachidate	0.66348	579.42	820.00	12.37	6.88711e+003	4.17438e+001
MMethAcryl	0.28900	373.45	947.55	9.25	0.00000e+000	-1.09700e+001
EMethaAcryla	0.34371	390.15	917.55	9.69	0.00000e+000	-1.65865e+001
M-Salicylate	0.63150	493.65	1182.95	8.13	3.04473e-005	-6.57952e+001
M-p-Toluate	0.54000	496.15	1063.66	9.05	-3.30353e-006	5.10006e-001
MTerephllate	0.77400	538.15	1007.96	9.82	9.93089e-006	3.74097e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
iPentylAceta	5.17985e-001	-3.37018e-004	1.38342e-007	-2.56502e-011	1.00000e+000	-0.04324
nPentylAceta	3.90706e-001	-1.66517e-004	3.08757e-008	-9.20180e-026	1.00000e+000	-0.01649
BZ-Acetate	5.01304e-001	-2.80954e-004	7.20109e-008	1.51640e-025	1.00000e+000	-0.39236
M-C3oate	1.57101e-001	-3.11971e-005	-4.57268e-009	-1.64586e-025	1.00000e+000	0.00794
E-C3oate	2.01834e-001	-4.79309e-005	-1.84969e-009	3.30013e-025	1.00000e+000	0.00820
Vinyl-C3oate	2.55766e-001	-1.08973e-004	1.93683e-008	1.61738e-025	1.00000e+000	0.00990
n-P-C3oate	3.94012e-001	-2.11611e-004	5.31515e-008	-1.05563e-025	1.00000e+000	-0.07768
i-B-C3oate	4.41588e-001	-2.37162e-004	5.95693e-008	-1.18309e-025	1.00000e+000	-0.01678
n-B-C3oate	3.24404e-001	-1.03174e-004	8.30071e-009	6.11262e-025	1.00000e+000	-0.09949
i-PentC3oate	3.62778e-001	-1.15777e-004	4.69487e-008	-2.91238e-026	1.00000e+000	-0.01764
M-C4oate	2.99454e-001	-1.44521e-004	3.22704e-008	-2.47510e-025	1.00000e+000	-0.00567
M-i-C4oate	2.28613e-001	-6.56598e-005	3.43678e-008	1.03129e-026	1.00000e+000	-0.00369
E-C4oate	2.46564e-001	-6.46389e-005	8.90336e-010	8.79687e-026	1.00000e+000	0.00057
E-i-C4oate	3.94012e-001	-2.11611e-004	5.31515e-008	-1.05563e-025	1.00000e+000	-0.01575
n-P-C4oate	3.28907e-001	-1.06979e-004	9.46115e-009	-4.73235e-025	1.00000e+000	-0.03667
n-P-i-C4oate	3.28907e-001	-1.06979e-004	9.46115e-009	-4.73235e-025	1.00000e+000	-0.01426
i-B-C4oate	3.62778e-001	-1.15777e-004	4.69487e-008	-2.91238e-026	1.00000e+000	-0.01792
i-B-i-C4oate	4.66492e-001	-2.03857e-004	3.92395e-008	-2.91238e-026	1.00000e+000	-0.14000
n-B-C4oate	3.35841e-001	-9.79954e-005	2.76845e-008	2.47552e-025	1.00000e+000	0.46975
E-i-C5-oate	4.19475e-001	-1.99656e-004	4.30011e-008	4.33799e-025	1.00000e+000	-0.12566
nPiC5-oate	3.62778e-001	-1.15777e-004	4.69487e-008	-2.91238e-026	1.00000e+000	-0.01476
M-BZoate	2.75228e-001	-6.00016e-005	1.10695e-008	-6.87387e-026	1.00000e+000	-0.30601
E-BZoate	3.44574e-001	-1.20344e-004	1.26632e-008	-7.20290e-025	1.00000e+000	-0.07571
PhenylBZoate	4.82742e-001	-1.71019e-004	2.01298e-008	-8.00649e-026	1.00000e+000	-0.02079
betaPLactone	1.43204e-001	-5.44050e-005	8.58369e-009	7.27654e-026	1.00000e+000	-0.15388
gamaBLactone	1.53745e-001	-3.27243e-005	-8.49309e-010	-1.95591e-025	1.00000e+000	-0.01785
Caprolactone	3.73003e-001	-1.53989e-004	2.60368e-008	5.76250e-026	1.00000e+000	-0.13613
Di-E-Oxalate	3.66983e-001	-1.75338e-004	3.72275e-008	-3.54160e-025	1.00000e+000	-0.54179
EGly-DiAceta	3.66983e-001	-1.75350e-004	3.72318e-008	1.69702e-025	1.00000e+000	0.09478
di-E-Malonat	4.37728e-001	-2.06189e-004	4.21885e-008	3.88151e-025	1.00000e+000	-0.25755
M-Acrylate	1.92574e-001	-7.95206e-005	1.35267e-008	3.08598e-025	1.00000e+000	-0.10164
E-Acrylate	2.88592e-001	-1.61190e-004	5.75753e-008	-1.04420e-011	1.00000e+000	0.09208
n-B-Acrylate	3.09031e-001	-1.21007e-004	2.43361e-008	-3.06374e-012	1.00000e+000	0.23383
nBMAcrylate	4.87464e-001	-2.73884e-004	9.30985e-008	-1.41875e-011	1.00000e+000	-0.08462
M-Caprate	5.37385e-001	-1.35274e-004	-3.46722e-021	1.29795e-024	1.00000e+000	0.48412
M-Caproate	3.75921e-001	-9.48763e-005	1.48070e-022	3.94363e-026	1.00000e+000	0.43884
M-Myristate	6.97750e-001	-1.74692e-004	-1.50382e-022	7.34287e-026	1.00000e+000	0.53635
M-Palmitate	7.80639e-001	-1.96819e-004	-3.41164e-021	-1.91162e-025	1.00000e+000	0.53494
M-Stearate	8.59235e-001	-2.15111e-004	1.23460e-021	-3.01415e-025	1.00000e+000	0.55239
M-Oleate	1.01813e+000	-5.08124e-004	1.55003e-007	-2.17131e-011	1.00000e+000	-0.07396
M-Linoleate	8.50565e-001	-2.14858e-004	1.43098e-021	8.91983e-026	1.00000e+000	0.53564
M-Caprylate	4.56643e-001	-1.15067e-004	1.58708e-021	-5.59236e-025	1.00000e+000	0.45817
M-Laureate	7.36346e-001	-3.84693e-004	1.26752e-007	-1.91322e-011	1.00000e+000	0.05070
M-Arachidate	9.37228e-001	-2.32867e-004	-2.29605e-021	-8.57325e-025	1.00000e+000	0.50099
MMethAcryl	2.59392e-001	-1.09458e-004	1.92673e-008	2.27444e-025	1.00000e+000	0.06020
EMethaAcryla	3.15301e-001	-1.34723e-004	2.45005e-008	-2.42025e-025	1.00000e+000	-0.13589
M-Salicylate	4.63522e-001	-2.90456e-004	1.06450e-007	-1.66851e-011	1.00000e+000	0.15000
M-p-Toluate	3.32822e-001	-1.11788e-004	9.85009e-009	3.82968e-020	1.00000e+000	-0.00822
MTerephltate	2.88460e-001	-7.24528e-005	-4.37493e-009	-1.19222e-019	1.00000e+000	0.07720

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
iPentylAceta	-0.39759	Ester	-3889900
nPentylAceta	-0.38602	Ester	-3893050
BZ-Acetate	-0.78693	Ester	-4381910
M-C3oate	-0.23014	Ester	-2077980
E-C3oate	-0.27092	Ester	-2673000
Vinyl-C3oate	-0.29181	Ester	-2587500
n-P-C3oate	-0.40988	Ester	-3270000
i-B-C3oate	-0.41521	Ester	-2700770
n-B-C3oate	-0.48594	Ester	-3900000
i-PentC3oate	-0.40950	Ester	
M-C4oate	-0.29374	Ester	-2680000
M-i-C4oate	-0.35137	Ester	-163880
E-C4oate	-0.30588	Ester	-3284500
E-i-C4oate	-0.38473	Ester	
n-P-C4oate	-0.42329	Ester	-3904800
n-P-i-C4oate	-0.40711	Ester	
i-B-C4oate	-0.43288	Ester	
i-B-i-C4oate	-0.54487	Ester	-4480000
n-B-C4oate	0.45601	Ester	-4502640
E-i-C5-oate	-0.51165	Ester	-3876500
nPiC5-oate	-0.38288	Ester	
M-BZoate	-0.67856	Ester	-3771000
E-BZoate	-0.56527	Ester	-4410000
PhenylBZoate	-0.52938	Ester	
betaPLactone	-0.02228	Ester	-1329010
gamaBLactone	-0.31940	Ester	-1867900
Caprolactone	-0.16425	Ester	-3083850
Di-E-Oxalate	-1.07746	Ester	-2723000
EGly-DiAceta	-0.44405	Ester	-2704740
di-E-Malonat	-0.75843	Ester	-3361000
M-Acrylate	-0.37691	Ester	-1937400
E-Acrylate	-0.17126	Ester	-2555000
n-B-Acrylate	-0.24761	Ester	-3770000
nBMAcrylate	-0.55746	Ester	-4420000
M-Caprate	0.43374	Ester	
M-Caproate	0.45330	Ester	
M-Myristate	0.42422	Ester	
M-Palmitate	0.41254	Ester	
M-Stearate	0.40908	Ester	
M-Oleate	-0.73745	Ester	-11100000
M-Linoleate	0.45701	Ester	
M-Caprylate	0.44218	Ester	
M-Laureate	-0.50342	Ester	-7566800
M-Arachidate	0.42169	Ester	
MMethAcryl	-0.18194	Ester	-2546800
EMethaAcryla	-0.39912	Ester	-3150000
M-Salicylate	-0.30692	Ester	-358380
M-p-Toluate	-0.39651	Ester	
MTerephllate	-0.56696	Ester	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
DMTerephlat	1226	194.190	772.00	27.80000	0.52900	0.49199	0.63710
2HyEAcrlyate	1227	116.113	662.00	39.80000	0.35900	0.41621	0.86413
DMMaleate	1228	144.126	675.00	32.20000	0.40300	0.41619	0.56236
nPAcrlyate	1229	114.140	569.00	32.50000	0.37600	0.38514	0.43155
EthylDiAcet	1230	146.143	627.00	31.40000	0.41600	0.43422	0.52630
tertBC2oate	1231	116.160	545.00	31.70000	0.38900	0.39332	0.33958
AllyMAcrylat	1232	126.152	600.00	30.20000	0.41500	0.41541	0.38812
Ic4Acrylate	1233	128.171	587.00	29.50000	0.43300	0.44680	0.45514
nPMAcrylate	1234	128.171	599.00	29.10000	0.42800	0.43711	0.40077
BZylFormate	1235	136.149	698.00	35.90000	0.39700	0.40597	0.42028
EGDiacetate	1236	170.164	689.00	27.00000	0.51800	0.53197	0.66176
DiEMaleate	1237	172.179	680.00	26.10000	0.50800	0.61379	0.66580
nHexylC2oate	1238	144.214	618.00	25.40000	0.49400	0.53315	0.53960
GlyTriC2oate	1239	218.207	704.00	23.10000	0.62500	0.68958	0.83893
nBValerate	1240	158.240	629.00	23.30000	0.54700	0.60124	0.59554
nC7Acetate	1241	158.240	637.00	23.30000	0.54700	0.60105	0.59529
nC8Formate	1242	158.240	645.00	23.30000	0.54700	0.59935	0.58709
IPentIsoVale	1243	172.268	637.00	22.00000	0.60000	0.66200	0.57852
nC8C2oate	1244	172.268	652.00	21.50000	0.60000	0.67130	0.65139
nBBZoate	1245	178.231	724.00	25.90000	0.55500	0.60420	0.57539
2EHxAcrlyate	1246	184.279	655.00	20.70000	0.66400	0.71033	0.67303
nNonyAcetate	1247	186.294	661.00	19.90000	0.65300	0.74548	0.71592
nDecAcetate	1248	200.320	678.00	18.60000	0.70500	0.81612	0.75025
nBC9oate	1249	214.348	652.00	17.40000	0.79400	0.89509	0.82793
MC12oate	1250	214.348	712.00	17.40000	0.75800	0.73304	0.68994
BzylBZoate	1251	212.248	820.00	25.80000	0.69400	0.70076	0.62249
DiClPEther	1252	171.070	613.15	28.47200	0.48000	0.48730	0.45400
Vinyl-M-Ethe	1253	58.080	436.00	47.60000	0.20498	0.20667	0.34000
M-E-Ether	1254	60.096	437.80	44.00000	0.22100	0.22820	0.24400
Vinyl-E-Ethe	1255	72.107	475.00	40.70000	0.25698	0.24943	0.26800
M-P-Ether	1256	74.123	476.30	37.00000	0.27399	0.33013	0.27099
M-i-P-Ether	1257	74.123	464.50	37.60000	0.27700	0.27790	0.26600
E-P-Ether	1258	88.150	500.20	33.70000	0.33899	0.34268	0.33300
B-M-Ether	1259	88.150	512.80	33.70000	0.32899	0.33956	0.31600
TAME	1260	102.180	536.83	31.14000	0.37850	0.38084	0.29173
E-B-Ether	1261	102.177	531.00	30.30000	0.38999	0.40182	0.40000
C4==Ether	1262	84.120	513.84	37.59100	0.29550	0.29615	0.29429
MPentylEther	1263	102.177	546.50	30.30000	0.39199	0.40288	0.34700
diP-Ether	1264	102.177	530.60	30.30000	0.38600	0.40070	0.36899
di-i-P-Ether	1265	102.177	500.30	28.80000	0.38600	0.40191	0.33100
M-PH-Ether	1266	108.138	645.60	41.70000	0.33700	0.33792	0.34700
disecBEther	1267	130.229	562.00	25.50000	0.48950	0.52354	0.41000
E-PH-Ether	1268	122.166	647.00	34.20000	0.40000	0.39618	0.41800
diB-Ether	1269	130.231	570.00	25.30000	0.49000	0.53021	0.50199
di-trt-B-Eth	1270	130.231	550.00	24.10000	0.49000	0.49096	0.32201
diPH-Ether	1271	170.210	765.00	31.30000	0.53700	0.53500	0.43999
diHX-Ether	1272	186.338	657.00	18.10000	0.72000	0.80873	0.69998
Methylal	1273	76.096	480.60	39.50000	0.21299	0.24334	0.28600
diVinyl-Ethe	1274	70.091	462.00	42.50000	0.25000	0.25744	0.29107

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
DMTerephlat	0.03397	561.15	1173.77	8.55	-3.55898e-005	-1.35539e+002
2HyEAcrylate	0.86413	484.00	1016.28	9.40	0.00000e+000	-3.57223e+001
DMMaleate	0.56236	478.15	1158.13	8.21	0.00000e+000	-3.25107e+000
nPAcrylate	0.43155	392.15	908.30	9.80	0.00000e+000	-4.68983e+001
EthylDiAcet	0.52630	442.15	1069.43	8.67	0.00000e+000	2.49191e+001
tertBC2oate	0.33958	369.15	870.78	10.02	0.00000e+000	-6.73637e+001
AllyMAcrylat	0.38812	412.65	928.67	9.75	0.00000e+000	-4.03283e+000
lc4Acrylate	0.45514	410.00	893.80	10.11	0.00000e+000	-4.93023e+001
nPMAcrylate	0.40077	414.00	906.11	10.01	0.00000e+000	-4.69458e+001
BZylFormate	0.42028	476.15	1086.39	8.74	0.00000e+000	-8.37033e+001
EGDiacetate	0.66176	503.00	1089.81	8.88	0.00000e+000	-9.79709e+001
DiEMaleate	0.66580	498.15	968.99	9.95	0.00000e+000	-8.99699e+001
nHexylC2oate	0.53960	444.65	876.51	10.59	0.00000e+000	-5.29199e+001
GlyTriC2oate	0.83893	532.15	1163.88	8.47	0.00000e+000	-8.62097e+001
nBValerate	0.59554	459.65	871.07	10.78	0.00000e+000	-5.14468e+001
nC7Acetate	0.59529	465.55	874.52	10.78	0.00000e+000	-6.26933e+001
nC8Formate	0.58709	471.95	878.13	10.79	0.00000e+000	-4.25803e+001
IPentIsoVale	0.57852	467.15	860.36	10.97	0.00000e+000	-6.52763e+001
nC8C2oate	0.65139	484.45	872.33	10.95	0.00000e+000	-6.56105e+001
nBBZoate	0.57539	523.15	1008.09	9.72	0.00000e+000	-8.46025e+001
2EHxAcrylate	0.67303	489.15	888.71	10.79	0.00000e+000	-5.18390e+001
nNonyAcetate	0.71592	497.10	869.33	11.09	0.00000e+000	-6.85093e+001
nDecAcetate	0.75025	517.15	869.08	11.24	0.00000e+000	-7.14085e+001
nBC9oate	0.82793	503.00	858.58	11.27	0.00000e+000	-6.77089e+001
MC12oate	0.68994	540.00	1029.82	9.62	0.00000e+000	-3.31174e+001
BzylBZoate	0.62249	596.65	1115.05	9.18	0.00000e+000	-1.25769e+002
DiClPEther	0.45400	455.85	1108.43	8.45	-1.16306e-004	4.53507e+001
Vinyl-M-Ethe	0.34000	285.00	756.78	10.58	0.00000e+000	1.56398e+001
M-E-Ether	0.24007	280.60	700.00	11.38	0.00000e+000	1.86808e+001
Vinyl-E-Ethe	0.26730	308.70	792.00	10.38	0.00000e+000	1.72913e+001
M-P-Ether	0.27099	311.70	617.22	13.36	0.00000e+000	2.13237e+001
M-i-P-Ether	0.26600	303.90	724.00	11.30	0.00000e+000	1.35386e+001
E-P-Ether	0.33300	336.40	732.00	11.56	0.00000e+000	7.09861e+000
B-M-Ether	0.31600	343.30	744.00	11.45	0.00000e+000	7.09861e+000
TAME	0.29173	359.45	777.52	11.12	-1.10734e-004	-1.53906e+000
E-B-Ether	0.40000	365.40	754.37	11.53	0.00000e+000	2.36445e+001
C4==Ether	0.29429	338.15	810.36	10.46	5.11035e-006	1.78612e+001
MPentylEther	0.34700	372.00	750.00	11.67	0.00000e+000	1.86320e+001
diP-Ether	0.36899	363.20	750.28	11.57	0.00000e+000	1.86320e+001
di-i-P-Ether	0.33000	341.70	724.00	11.75	0.00000e+000	7.50992e+000
M-PH-Ether	0.34700	426.80	996.00	9.20	0.00000e+000	-4.64971e+001
disecBEther	0.41000	394.20	755.00	11.81	-3.33389e-006	1.73395e+001
E-PH-Ether	0.41800	442.00	979.00	9.47	0.00000e+000	-4.60969e+001
diB-Ether	0.50199	413.40	772.14	11.74	0.00000e+000	6.05773e+000
di-trt-B-Eth	0.32201	382.20	781.22	11.30	0.00000e+000	6.05773e+000
diPH-Ether	0.43999	531.20	1058.81	9.30	0.00000e+000	-6.07665e+001
diHX-Ether	0.69998	499.60	1223.80	7.89	0.00000e+000	2.18388e+001
Methylal	0.28600	315.00	865.97	9.56	6.97695e+003	2.63261e+001
diVinyl-Ethe	0.29107	301.45	742.26	10.99	0.00000e+000	5.88351e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
DMTerephlat	6.78228e-001	-4.29915e-004	1.16006e-007	3.36151e-012	1.00000e+000	0.33209
2HyEAcrilate	4.33853e-001	-3.47660e-004	1.62820e-007	-3.10689e-011	1.00000e+000	-0.82060
DMMaleate	3.85131e-001	-2.67423e-004	1.18430e-007	-2.32700e-011	1.00000e+000	0.15614
nPAcrilate	4.79504e-001	-3.75548e-004	1.75850e-007	-3.40019e-011	1.00000e+000	-0.07111
EthylDiAcet	1.30146e-001	3.81840e-004	-5.11148e-007	1.92887e-010	1.00000e+000	-0.21531
tertBC2oate	5.16863e-001	-3.86210e-004	1.78173e-007	-3.56868e-011	1.00000e+000	-0.05849
AllyMAcrylat	3.37814e-001	-2.42560e-004	1.16241e-007	-2.49529e-011	1.00000e+000	-0.13048
lc4Acrylate	5.28184e-001	-3.92211e-004	1.77382e-007	-3.38405e-011	1.00000e+000	-0.00193
nPMAcrylate	4.50874e-001	-2.71732e-004	1.00822e-007	-1.68281e-011	1.00000e+000	-0.14641
BZylFormate	4.79118e-001	-2.93950e-004	9.79448e-008	-1.17279e-011	1.00000e+000	-0.43918
EGDiacetate	7.93754e-001	-7.43506e-004	3.94023e-007	-8.47890e-011	1.00000e+000	-0.34483
DiEMaleate	7.73848e-001	-6.76636e-004	3.38750e-007	-6.85894e-011	1.00000e+000	0.04972
nHexylC2oate	5.51506e-001	-3.43999e-004	1.35669e-007	-2.37760e-011	1.00000e+000	-0.08464
GlyTriC2oate	7.59875e-001	-5.23276e-004	1.96038e-007	-2.70387e-011	1.00000e+000	-0.26891
nBValerate	6.06327e-001	-3.78433e-004	1.50390e-007	-2.69527e-011	1.00000e+000	-0.13265
nC7Acetate	6.22519e-001	-3.87150e-004	1.49333e-007	-2.49670e-011	1.00000e+000	0.06254
nC8Formate	5.74272e-001	-3.31638e-004	1.20677e-007	-1.97643e-011	1.00000e+000	-0.02929
IPentIsoVale	6.78433e-001	-4.14630e-004	1.58504e-007	-2.71961e-011	1.00000e+000	-0.16248
nC8C2oate	6.75394e-001	-4.11986e-004	1.56164e-007	-2.57754e-011	1.00000e+000	0.08169
nBBZoate	5.85783e-001	-3.19009e-004	1.00870e-007	-1.34229e-011	1.00000e+000	-0.44123
2EHxAcrylate	7.10108e-001	-4.48181e-004	1.76786e-007	-3.07989e-011	1.00000e+000	-0.21812
nNonAcetate	7.28225e-001	-4.36735e-004	1.62934e-007	-2.65683e-011	1.00000e+000	-0.11603
nDecAcetate	7.81030e-001	-4.61461e-004	1.69692e-007	-2.73583e-011	1.00000e+000	0.08352
nBC9oate	8.32264e-001	-4.98303e-004	1.90953e-007	-3.32104e-011	1.00000e+000	-0.08192
MC12oate	7.45880e-001	-3.97832e-004	1.35186e-007	-2.11686e-011	1.00000e+000	-0.14586
BzylBZoate	6.58542e-001	-3.04272e-004	4.37040e-008	9.83950e-012	1.00000e+000	-0.68926
DiClIPEther	2.68026e-001	-7.96009e-005	5.60005e-009	1.43933e-018	1.00000e+000	-0.00490
Vinyl-M-Ethe	1.17127e-001	-3.23437e-005	2.65660e-009	-2.93229e-026	1.00000e+000	0.05026
M-E-Ether	1.34340e-001	-3.41886e-005	2.23920e-009	1.09227e-025	1.00000e+000	0.02228
Vinyl-E-Ethe	1.61907e-001	-4.90641e-005	5.37827e-009	-1.96586e-025	1.00000e+000	-0.12437
M-P-Ether	1.69611e-001	-3.75910e-005	-7.14209e-010	-2.69442e-025	1.00000e+000	0.09256
M-i-P-Ether	1.84970e-001	-4.93994e-005	3.01447e-009	-1.42206e-025	1.00000e+000	0.00639
E-P-Ether	2.48926e-001	-8.56120e-005	1.25619e-008	-1.33513e-025	1.00000e+000	0.03636
B-M-Ether	2.48926e-001	-8.56120e-005	1.25619e-008	-1.33513e-025	1.00000e+000	0.00157
TAME	3.18252e-001	-1.21136e-004	1.93254e-008	1.34966e-018	1.00000e+000	0.21712
E-B-Ether	2.68526e-001	-8.43221e-005	1.03989e-008	-1.34124e-025	1.00000e+000	-0.03086
C4==Ether	1.87804e-001	-6.10015e-005	7.07517e-009	-5.56462e-020	1.00000e+000	0.37774
MPentylEther	2.66927e-001	-7.62155e-005	6.10887e-009	3.09517e-026	1.00000e+000	-0.00192
diP-Ether	2.66927e-001	-7.62155e-005	6.10887e-009	3.09517e-026	1.00000e+000	0.01882
di-i-P-Ether	2.92635e-001	-1.00963e-004	1.46216e-008	-1.13490e-025	1.00000e+000	-0.02233
M-PH-Ether	3.25230e-001	-1.44772e-004	2.81078e-008	-3.27574e-026	1.00000e+000	-0.05237
disecBEther	3.60702e-001	-1.12085e-004	1.21439e-008	7.41146e-020	1.00000e+000	0.41173
E-PH-Ether	3.63522e-001	-1.49374e-004	2.51426e-008	-2.40545e-025	1.00000e+000	-0.00781
diB-Ether	3.86707e-001	-1.36250e-004	2.02250e-008	-5.25999e-026	1.00000e+000	0.00942
di-trt-B-Eth	3.86707e-001	-1.36250e-004	2.02250e-008	-5.25999e-026	1.00000e+000	-0.00317
diPH-Ether	4.64401e-001	-1.95796e-004	3.39962e-008	-2.06242e-025	1.00000e+000	-0.07859
diHX-Ether	3.49363e-001	-1.20144e-004	2.73166e-008	-1.12892e-025	1.00000e+000	-0.01349
Methylal	5.17280e-002	2.06484e-004	-2.36669e-007	8.12081e-011	1.00000e+000	0.11721
diVinyl-Ethe	1.61455e-001	-6.18194e-005	1.02046e-008	6.36964e-026	1.00000e+000	0.02512

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
DMTerephthalat	-0.20635	Ester	-4411500
2HyEAcrilate	-1.84867	Ester	-2369990
DMMaleate	-0.37679	Ester	-2647500
nPAcrilate	-0.38286	Ester	-3160000
EthylDiAcet	-0.65300	Ester	-2700000
tertBC2oate	-0.43008	Ester	-3251000
AllyMAcrylat	-0.36376	Ester	-3729990
Ic4Acrylate	-0.35455	Ester	-3769990
nPMAcrylate	-0.44252	Ester	-3760000
BZylFormate	-0.75392	Ester	-3809990
EGDiacetate	-0.65614	Ester	-3689990
DiEMaleate	-0.48693	Ester	-3800000
nHexylC2oate	-0.51340	Ester	-4505000
GlyTriC2oate	-0.78108	Ester	-3903000
nBValerate	-0.58257	Ester	-5105000
nC7Acetate	-0.41581	Ester	-5113000
nC8Formate	-0.47370	Ester	-5157000
IPentIsoVale	-0.61958	Ester	-5713070
nC8C2oate	-0.42006	Ester	-5723000
nBBZoate	-0.96238	Ester	-5590000
2EHxAcrylate	-0.69152	Ester	-6221000
nNonyAcetate	-0.59596	Ester	-6332000
nDecAcetate	-0.44256	Ester	-6942000
nBC9oate	-0.69605	Ester	-7561000
MC12oate	-0.63013	Ester	-7566800
BzylBZoate	-1.13645	Ester	-6690000
DiClIPEther	-0.37580	Ether	
Vinyl-M-Ethe	0.03198	Ether	-1774200
M-E-Ether	-0.00422	Ether	-1931370
Vinyl-E-Ethe	-0.25872	Ether	-2372920
M-P-Ether	-0.10266	Ether	
M-i-P-Ether	-0.25920	Ether	
E-P-Ether	-0.17912	Ether	-3110000
B-M-Ether	-0.31161	Ether	
TAME	0.17836	Ether	-163880
E-B-Ether	-0.36052	Ether	-3725000
C4==Ether	0.47561	Ether	-163880
MPentylEther	-0.33735	Ether	
diP-Ether	-0.24255	Ether	-3725000
di-i-P-Ether	-0.32052	Ether	-3702340
M-PH-Ether	-0.32207	Ether	-3601800
disecBEther	0.45136	Ether	
E-PH-Ether	-0.34950	Ether	-4204790
diB-Ether	-0.33355	Ether	-4947150
di-trt-B-Eth	-0.30741	Ether	
diPH-Ether	-0.44279	Ether	-5920000
diHX-Ether	-0.55765	Ether	-7383830
Methylal	-0.14034	Ether	-1799700
diVinyl-Ethe	-0.06418	Ether	-2259990

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
12Methoxy-C2	1275	90.123	536.00	38.70000	0.27099	0.30542	0.35800
Vinyl-B-Ethe	1276	100.161	536.00	31.10000	0.36399	0.37874	0.38016
Paraldehyde	1277	132.158	577.00	35.00000	0.36500	0.41021	0.44047
Acetal	1278	118.176	541.00	29.80000	0.40200	0.42844	0.30239
diEGlydiMEth	1279	134.175	602.00	28.60000	0.42199	0.45820	0.57476
E-Bz-Ether	1280	136.194	662.00	31.10000	0.44200	0.45873	0.43323
di-BZ-Ether	1281	198.264	777.00	25.60000	0.63400	0.66061	0.59074
di-nonyl-Eth	1282	270.497	735.00	13.00000	0.10198	1.30438	1.00206
Furan	1283	68.075	490.20	55.00000	0.21796	0.19888	0.20900
TetraHyFuran	1284	72.107	540.10	51.90000	0.22400	0.23149	0.21694
2-M-Furan	1285	82.102	527.00	47.20000	0.24695	0.25744	0.27000
2-M-4HyFuran	1286	86.134	537.00	37.60000	0.26699	0.28992	0.26399
C2Oxide	1287	44.054	469.00	71.90000	0.14000	0.13515	0.20200
12C3Oxide	1288	58.080	482.20	49.20000	0.18600	0.19201	0.26899
12-C4=Oxide	1289	72.100	525.75	43.87400	0.24850	0.24670	0.27000
Dioxolane	1290	74.080	500.63	48.83400	0.24050	0.21712	0.69405
13C3=Oxide	1291	58.080	520.00	57.50000	0.18800	0.17964	0.20051
Trioxane	1292	90.078	604.00	58.20000	0.22400	0.22216	0.33372
25DiHyFuran	1293	70.091	542.00	55.00000	0.21600	0.21124	0.22918
tBHyPeroxide	1294	90.122	552.00	43.40000	0.29000	0.32385	0.66231
MlsoBEther	1295	88.149	497.00	34.10000	0.32900	0.33918	0.31006
CC6Peroxide	1296	116.160	685.00	42.10000	0.35600	0.40455	0.75707
MTPentE	1297	102.177	534.00	30.40000	0.38200	0.38216	0.30111
ETrtPetEther	1298	116.203	544.00	27.40000	0.43500	0.44773	0.35292
Phenetole	1299	122.166	647.15	34.24800	0.39000	0.40011	0.41838
2MBenzoFuran	1300	132.162	698.00	36.40000	0.40500	0.39940	0.37418
DinPentEther	1301	158.283	622.00	20.90000	0.59300	0.66435	0.60117
DinC8Ether	1302	242.445	707.00	14.40000	0.91000	1.13774	0.93362
2-Cl-Ethanol	1303	80.514	585.00	59.20000	0.21200	0.21978	0.65780
Halothane	1304	197.382	521.00	39.20000	0.29600	0.28483	0.09050
Br-Cl-F2-C1	1305	165.363	426.90	42.50000	0.24548	0.23725	0.18400
CCl4	1306	153.822	556.40	45.60000	0.27590	0.27540	0.19300
Chloroform	1307	119.375	536.40	53.70000	0.23890	0.25749	0.21796
Cl2-C1	1308	84.933	510.00	60.70000	0.18500	0.17655	0.19900
CH2-Cl-F	1309	68.480	424.90	51.20000	0.15850	0.14246	0.19900
CiC2	1310	64.510	460.40	53.70000	0.19900	0.18580	0.19099
11-CiC2	1311	98.960	523.00	50.70000	0.23600	0.23690	0.23995
12-CiC2	1312	98.960	566.00	53.70000	0.22495	0.23261	0.27799
11-CiC2=	1313	96.943	482.00	51.90000	0.22400	0.23668	0.27210
perCl-C2	1314	236.739	704.40	39.20000	0.41950	0.41313	0.27500
11-F-C2	1315	66.051	386.70	45.00000	0.18095	0.17396	0.25600
12Br1ClF3C2	1316	276.277	560.70	36.10000	0.36800	0.38855	0.24796
Cl3-C2=	1317	131.389	572.00	50.50000	0.25600	0.26080	0.21299
Cl-F3-C2=	1318	116.469	377.00	40.50000	0.21198	0.23657	0.25200
111-F-C2	1319	84.041	346.30	37.60000	0.19400	0.22359	0.25099
11Cl222FC2	1320	152.910	458.15	37.85100	0.28850	0.27906	0.29311
12Cl1122FC2	1321	170.921	418.90	32.60000	0.29379	0.30379	0.24600
Cl4-C2=	1322	165.832	620.20	47.60000	0.28960	0.30281	0.24320
112-CiC2	1323	133.404	606.00	51.40000	0.28499	0.27665	0.28299

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
12Methoxy-C2	0.35800	357.00	868.97	9.93	0.00000e+000	3.22505e+001
Vinyl-B-Ethe	0.38016	366.97	783.26	11.12	0.00000e+000	7.55299e+000
Paraldehyde	0.44047	397.25	995.55	8.98	0.00000e+000	-1.22228e+002
Acetal	0.43209	376.75	830.78	10.58	0.00000e+000	-2.48027e+001
diEGlydiMEth	0.57476	432.91	951.57	9.67	0.00000e+000	1.18510e+001
E-Bz-Ether	0.43323	458.15	952.40	9.85	0.00000e+000	-4.97040e+001
di-BZ-Ether	0.59074	561.45	1047.42	9.58	0.00000e+000	-1.00855e+002
di-nonyl-Eth	1.00206	591.00	814.47	12.53	0.00000e+000	-1.55744e+001
Furan	0.20610	304.50	938.00	8.73	0.00000e+000	-3.55411e+001
TetraHyFuran	0.22269	337.00	889.00	9.52	0.00000e+000	1.91120e+001
2-M-Furan	0.27000	337.00	913.00	9.27	0.00000e+000	-9.65022e+000
2-M-4HyFuran	0.26399	351.00	855.00	10.04	0.00000e+000	-4.67362e+001
C2Oxide	0.21140	283.70	882.08	9.06	3.33032e-007	-7.51870e+000
12C3Oxide	0.25929	308.00	835.41	9.83	1.93192e-005	-1.49358e+001
12-C4=Oxide	0.27000	336.35	835.95	10.12	2.75979e-005	-1.17558e+001
Dioxolane	0.69405	351.15	1067.47	8.04	-9.69789e-006	3.01323e+001
13C3=Oxide	0.20051	321.00	905.36	9.20	0.00000e+000	-3.40696e+001
Trioxane	0.33372	387.65	1174.68	7.55	0.00000e+000	9.14098e+000
25DiHyFuran	0.22918	339.00	949.68	8.93	0.00000e+000	-9.72814e+000
tBHyPeroxide	0.66231	388.15	898.42	9.88	0.00000e+000	-1.09310e+000
MlsoBEther	0.31006	331.70	734.38	11.47	0.00000e+000	-1.58425e+001
CC6Peroxide	0.75707	490.00	1021.71	9.39	0.00000e+000	-7.55488e+001
MTPentE	0.30111	359.45	775.01	11.16	0.00000e+000	-7.70426e+000
ETrtPetEther	0.35292	374.15	767.41	11.42	0.00000e+000	-4.39140e+001
Phenetole	0.41838	443.15	969.46	9.57	0.00000e+000	-7.60449e+001
2MBenzoFuran	0.37418	470.65	1050.93	9.00	0.00000e+000	-6.23904e+001
DinPentEther	0.60117	459.90	787.15	11.93	0.00000e+000	-1.86772e+001
DinC8Ether	0.93362	559.65	809.07	12.39	0.00000e+000	-3.50343e+001
2-Cl-Ethanol	0.65780	401.75	1205.93	7.44	4.26522e-006	1.30212e+001
Halothane	0.09050	323.35	1891.89	4.41	-2.64737e-007	6.42627e+001
Br-Cl-F2-C1	0.18400	268.00	1843.79	4.25	0.00000e+000	2.50806e+001
CCl4	0.18750	349.90	1601.28	5.35	0.00000e+000	4.07459e+001
Chloroform	0.70586	334.30	1498.17	5.64	3.37342e-008	2.39988e+001
Cl2-C1	0.19584	313.00	1335.96	6.18	0.00000e+000	1.29582e+001
CH2-Cl-F	0.19900	264.10	1284.38	6.08	-4.45956e-007	1.26739e+001
CIC2	0.18795	285.50	902.49	8.88	0.00000e+000	-5.53357e-001
11-CIC2	0.23646	330.50	1182.56	7.11	0.00000e+000	1.24776e+001
12-CIC2	0.27540	356.70	1250.00	6.90	0.00000e+000	2.05025e+001
11-CIC2=	0.27210	304.71	1131.89	7.23	-8.39712e+004	1.56096e+001
perCl-C2	0.27500	459.20	2089.87	4.49	-5.59658e-006	5.23345e+001
11-F-C2	0.25600	248.20	1011.96	7.55	0.00000e+000	8.68056e+001
12Br1ClF3C2	0.24796	366.00	2068.51	4.21	0.00000e+000	5.19235e+000
Cl3-C2=	0.21299	360.40	1460.00	5.93	0.00000e+000	3.01887e+001
Cl-F3-C2=	0.25200	245.30	1305.56	5.83	0.00000e+000	4.08223e+001
111-F-C2	0.25099	225.60	993.36	7.46	0.00000e+000	5.74767e+000
11Cl222FC2	0.29311	300.76	1487.01	5.48	-7.42741e-008	1.83676e+001
12Cl1122FC2	0.25819	276.20	1480.00	5.35	0.00000e+000	3.88040e+001
Cl4-C2=	0.21377	394.40	1627.93	5.48	0.00000e+000	4.59985e+001
112-CIC2	0.25975	386.70	1440.00	6.15	0.00000e+000	6.32595e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
12Methoxy-C2	1.78468e-001	-4.45619e-005	2.10111e-009	2.18402e-025	1.00000e+000	0.06861
Vinyl-B-Ethe	2.66616e-001	-8.95946e-005	1.15381e-008	-1.41592e-025	1.00000e+000	-0.00771
Paraldehyde	5.84801e-001	-3.41036e-004	8.31302e-008	3.73647e-025	1.00000e+000	-0.18294
Acetal	3.78467e-001	-1.62943e-004	3.00212e-008	1.78991e-025	1.00000e+000	0.02561
diEGlydiMEth	3.31245e-001	-1.16144e-004	1.54040e-008	-2.16771e-025	1.00000e+000	-0.03936
E-Bz-Ether	4.14152e-001	-1.67347e-004	2.77239e-008	-3.16298e-025	1.00000e+000	-0.17915
di-BZ-Ether	6.22484e-001	-2.71473e-004	4.95382e-008	-1.90186e-025	1.00000e+000	-0.65403
di-nonyl-Eth	8.84809e-001	-3.33447e-004	5.40675e-008	1.09253e-025	1.00000e+000	0.46513
Furan	2.16191e-001	-1.15243e-004	2.68675e-008	2.40582e-026	1.00000e+000	-0.02566
TetraHyFuran	2.58269e-001	-1.37825e-004	3.63722e-008	8.00904e-026	1.00000e+000	0.01991
2-M-Furan	1.96637e-001	-7.20929e-005	2.11804e-008	1.74093e-025	1.00000e+000	0.01020
2-M-4HyFuran	2.89284e-001	-1.09443e-004	2.78104e-008	-8.69731e-026	1.00000e+000	0.00481
C2Oxide	1.11100e-001	-4.18665e-005	6.47982e-009	-1.78509e-021	1.00000e+000	0.14767
12C3Oxide	1.80748e-001	-8.59114e-005	1.93508e-008	-2.47736e-019	1.00000e+000	0.26425
12-C4=Oxide	2.04806e-001	-6.77803e-005	6.38055e-009	-3.52800e-019	1.00000e+000	0.25429
Dioxolane	1.26372e-001	-1.90807e-005	-4.98927e-009	1.11161e-019	1.00000e+000	0.44353
13C3=Oxide	2.07904e-001	-1.24787e-004	5.21266e-008	-9.34217e-012	1.00000e+000	0.04986
Trioxane	1.12738e-001	5.80667e-005	-7.52647e-008	2.07654e-011	1.00000e+000	0.67254
25DiHyFuran	1.63313e-001	-3.31464e-005	-1.55308e-008	6.89414e-012	1.00000e+000	-0.11747
tBHyPeroxide	2.88515e-001	-1.67733e-004	6.29116e-008	-1.09041e-011	1.00000e+000	0.49116
MlsoBEther	3.13776e-001	-1.75700e-004	7.42852e-008	-1.67125e-011	1.00000e+000	-0.03304
CC6Peroxide	5.16091e-001	-4.05192e-004	2.42630e-007	-7.04011e-011	1.00000e+000	0.50587
MTPentE	3.45925e-001	-1.63661e-004	4.86681e-008	-6.97761e-012	1.00000e+000	-0.16177
ETrtPetEther	4.90003e-001	-3.09840e-004	1.34676e-007	-2.82022e-011	1.00000e+000	-0.06015
Phenetole	4.53174e-001	-2.70917e-004	1.00738e-007	-1.75527e-011	1.00000e+000	-0.05560
2MBenzoFuran	4.49076e-001	-2.77107e-004	1.00851e-007	-1.60007e-011	1.00000e+000	0.38960
DinPentEther	5.42134e-001	-2.44742e-004	6.66278e-008	-8.37262e-012	1.00000e+000	-0.16557
DinC8Ether	8.56192e-001	-3.90033e-004	1.05902e-007	-1.29520e-011	1.00000e+000	0.17955
2-Cl-Ethanol	1.27873e-001	-5.51079e-005	1.30371e-008	-1.30922e-012	1.00000e+000	-0.06477
Halothane	6.52089e-002	2.55779e-005	-4.20520e-008	1.21993e-011	1.00000e+000	0.21524
Br-Cl-F2-C1	1.07901e-001	-6.76361e-005	1.60733e-008	-1.29405e-025	1.00000e+000	0.23894
CCl4	1.02515e-001	-7.57104e-005	2.21216e-008	2.32981e-025	1.00000e+000	0.13955
Chloroform	9.46474e-002	-6.13646e-005	1.66416e-008	1.74012e-022	1.00000e+000	0.13379
Cl2-C1	8.12039e-002	-4.34250e-005	1.05264e-008	2.14401e-027	1.00000e+000	0.03204
CH2-Cl-F	6.98647e-002	-2.95695e-005	5.39423e-009	1.08380e-020	1.00000e+000	0.31904
CiC2	1.30386e-001	-6.13724e-005	1.38789e-008	-1.23763e-025	1.00000e+000	0.08300
11-CiC2	1.34887e-001	-6.83757e-005	1.57626e-008	6.99467e-026	1.00000e+000	-0.01766
12-CiC2	1.15576e-001	-4.79618e-005	8.47788e-009	6.99467e-026	1.00000e+000	-0.01402
11-CiC2=	1.18160e-001	-8.17248e-005	3.28587e-008	-5.65334e-012	1.00000e+000	-0.02864
perCl-C2	1.52245e-001	-1.11565e-004	3.21922e-008	1.34543e-019	1.00000e+000	0.37519
11-F-C2	1.19877e-001	-4.85965e-005	8.49033e-009	-2.06753e-025	1.00000e+000	-0.00217
12Br1ClF3C2	2.25178e-001	-1.34895e-004	2.96280e-008	-5.23066e-026	1.00000e+000	0.01987
Cl3-C2=	1.14421e-001	-7.43454e-005	2.06232e-008	7.96014e-026	1.00000e+000	0.09188
Cl-F3-C2=	9.27815e-002	-4.80004e-005	9.94961e-009	1.67585e-025	1.00000e+000	0.42234
111-F-C2	1.57153e-001	-8.66219e-005	2.10509e-008	7.63738e-026	1.00000e+000	-0.18964
11Ci222FC2	1.87246e-001	-1.16666e-004	2.95993e-008	5.77219e-022	1.00000e+000	0.16504
12Ci1122FC2	1.72111e-001	-9.83965e-005	2.12829e-008	3.79689e-025	1.00000e+000	0.33182
Cl4-C2=	1.12818e-001	-7.65117e-005	2.09681e-008	7.11652e-026	1.00000e+000	0.09088
112-CiC2	1.71660e-001	-9.86591e-005	2.44979e-008	-1.14498e-025	1.00000e+000	-0.12053

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
12Methoxy-C2	-0.20532	Ether	-2401900
Vinyl-B-Ethe	-0.32376	Ether	-3591440
Paraldehyde	-0.70481	Ether	-3125190
Acetal	-0.23160	Ether	-3562500
diEGlydiMEth	-0.46175	Ether	-3489030
E-Bz-Ether	-0.52156	Ether	-4820000
di-BZ-Ether	-1.07237	Ether	-7145150
di-nonyl-Eth	-0.48754	Ether	-11100000
Furan	-0.26524	Ether	-1995890
TetraHyFuran	-0.21306	Ether	-2325000
2-M-Furan	-0.27364	Ether	
2-M-4HyFuran	-0.27579	Ether	
C2Oxide	0.03233	Ether	-1217000
12C3Oxide	0.06089	Ether	-1785200
12-C4=Oxide	0.00424	Ether	-2299990
Dioxolane	0.44344	Ether	
13C3=Oxide	0.15798	Ether	-1801100
Trioxane	-0.37161	Ether	-1383800
25DiHyFuran	0.17605	Ether	-2160000
tBHyPeroxide	0.45732	Ether	-2736340
MlsoBEther	-0.26634	Ether	-3121990
CC6Peroxide	0.45117	Ether	-3540000
MTPentE	-0.36765	Ether	-3710000
ETrtPetEther	-0.38560	Ether	-4319700
Phenetole	-0.40551	Ether	-4204790
2MBenzoFuran	0.46253	Ether	-4450000
DinPentEther	-0.60130	Ether	-6170010
DinC8Ether	-0.49461	Ether	-9820000
2-Cl-Ethanol	-0.98495	Halogen	-1080000
Halothane	-0.31369	Halogen	-158470
Br-Cl-F2-C1	0.12002	Halogen	53200
CCI4	-0.15568	Halogen	-258069
Chloroform	-0.01488	Halogen	34200
Cl2-C1	-0.13375	Halogen	-513879
CH2-Cl-F	0.49032	Halogen	
CIC2	-0.03239	Halogen	-1284910
11-CIC2	-0.25088	Halogen	-1109680
12-CIC2	-0.31360	Halogen	-1104980
11-CIC2=	-0.33441	Halogen	-1004000
perCl-C2	0.48049	Halogen	
11-F-C2	-0.23522	Halogen	-758501
12Br1ClF3C2	-0.25784	Halogen	
Cl3-C2=	-0.02575	Halogen	-864113
Cl-F3-C2=	-0.49873	Halogen	-213000
111-F-C2	-0.06311	Halogen	-413400
11Cl222FC2	-0.43015	Halogen	
12Cl1122FC2	-0.28389	Halogen	322000
Cl4-C2=	-0.08145	Halogen	-735473
112-CIC2	-0.40920	Halogen	-963848

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
1122-CIC2	1324	167.850	661.20	58.20000	0.33000	0.32095	0.30090
1122CI12FC2	1325	203.830	551.00	38.70000	0.36689	0.26897	0.29118
CI-1122-FC2	1326	136.475	399.90	37.20000	0.24400	0.26392	0.28099
CI5-C2	1327	202.294	645.00	34.70000	0.36899	0.36289	0.33700
1-ci2-CIC2=	1328	96.944	537.00	55.00000	0.21999	0.21784	0.21705
1-tr2-CIC2=	1329	96.944	512.00	48.10000	0.21999	0.21592	0.18520
111-CIC2	1330	133.404	545.00	42.00000	0.28499	0.28338	0.21694
1-CIC3	1331	78.542	502.00	45.70000	0.24695	0.24334	0.23499
12-CIC3	1332	112.986	577.00	44.50000	0.22597	0.28786	0.23995
13-CIC3	1333	112.986	602.70	40.10000	0.30150	0.28460	0.28800
22-CIC3	1334	112.986	539.50	41.00000	0.29050	0.28606	0.19800
123-CIC3	1335	147.432	650.00	39.50000	0.34799	0.32789	0.31000
2-CIC3	1336	78.542	485.00	45.20000	0.23000	0.24940	0.23194
3-CI-1-C3=	1337	145.419	618.08	41.30300	0.32050	0.31120	0.22836
1-CIC4	1338	92.569	542.00	36.70000	0.31200	0.29690	0.21796
2-CIC4	1339	92.569	520.60	39.50000	0.30500	0.30384	0.30000
2-CI-2-M-C3	1340	92.569	507.00	39.50000	0.29499	0.30493	0.18998
1-CI-3-M-C4	1341	106.597	558.90	33.50000	0.35850	0.35800	0.29300
2-CI-2-M-C4	1342	106.597	547.00	32.00000	0.35350	0.34441	0.23300
Chloroprene	1343	88.536	525.00	42.60000	0.27300	0.26875	0.19300
PerCI13C4==	1344	260.760	740.00	28.30000	0.49100	0.50840	0.15500
1-CIC5	1345	106.597	552.00	33.20000	0.36450	0.36473	0.43700
Br-F5-BZ	1346	246.960	601.00	30.30000	0.40000	0.39311	0.35499
CI-BZ	1347	112.555	632.40	45.20000	0.30799	0.30667	0.24898
12-CI-BZ	1348	147.003	729.00	41.00000	0.36000	0.31848	0.10230
13-CI-BZ	1349	147.003	683.95	40.70000	0.35100	0.35214	0.27898
14-CI-BZ	1350	147.003	684.75	40.70000	0.35100	0.35580	0.28464
124TriCIBZ	1351	181.447	725.00	37.20000	0.39500	0.43431	0.35810
PerCI-BZ	1352	284.799	825.80	32.20000	0.55750	0.63767	0.54300
CI-F5-BZ	1353	202.509	570.80	32.20000	0.37599	0.30847	0.40000
CF4	1354	88.005	227.60	37.20000	0.13955	0.14390	0.17700
12-F-BZ	1355	114.086	554.50	40.70000	0.29950	0.28944	0.32000
CI2-F4-BZ	1356	218.964	626.00	53.20000	0.40000	0.46557	0.62199
135-CI-F3-BZ	1357	235.419	684.90	32.70000	0.44800	0.46151	0.42598
AcetylCI	1358	78.498	507.00	58.70000	0.20397	0.20442	0.34400
AllylCI	1359	76.526	514.00	47.60000	0.23398	0.22393	0.12996
VinylFI	1360	46.044	327.90	52.30000	0.14395	0.18738	0.15700
Br2-F2-C1	1361	209.815	471.30	41.20000	0.25000	0.22807	0.17700
Fluoroform	1362	70.013	299.30	48.60000	0.13267	0.14105	0.25999
F-C1	1363	34.033	315.00	58.70000	0.11320	0.10540	0.18700
F2-C1	1364	52.023	351.60	58.20000	0.12080	0.12101	0.27099
12-Br-F4-C2	1365	259.821	487.80	33.70000	0.34099	0.32975	0.24500
C2-CI-F5	1366	154.466	353.20	32.20000	0.25180	0.29648	0.27900
perF-C2	1367	138.011	293.00	30.60000	0.22200	0.22653	0.24514
perF-C2=	1368	100.013	306.50	39.20000	0.17200	0.25630	0.22300
11-FC2=	1369	64.035	302.90	44.60000	0.15410	0.24251	0.14000
F-C2	1370	48.060	375.30	50.20000	0.16400	0.15770	0.21500
perF-C3	1371	188.016	345.10	26.80000	0.29980	0.35885	0.32499
F3-C3=	1372	96.051	376.20	37.00000	0.21096	0.29361	0.23800

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
1122-CIC2	0.25920	419.40	1600.00	5.69	0.00000e+000	2.76869e+001
1122CI12FC2	0.29118	366.00	2215.62	3.93	0.00000e+000	2.59470e+001
CI-1122-FC2	0.28099	263.00	1369.18	5.69	0.00000e+000	3.96991e+001
CI5-C2	0.24548	435.00	1689.15	5.46	0.00000e+000	4.39666e+001
1-ci2-CIC2=	0.26372	333.30	1280.63	6.59	0.00000e+000	1.16167e+001
1-tr2-CIC2=	0.23194	321.90	1260.27	6.62	0.00000e+000	1.82913e+001
111-CIC2	0.21694	347.20	1346.04	6.35	0.00000e+000	1.94823e+001
1-CIC3	0.22630	320.40	867.89	9.59	0.00000e+000	-3.34690e+000
12-CIC3	0.23995	369.50	1149.96	7.59	0.00000e+000	1.04567e+001
13-CIC3	0.28800	393.60	1193.22	7.47	-3.43656e-006	1.77803e+001
22-CIC3	0.19800	342.50	1120.25	7.60	-4.79867e-006	1.07196e+001
123-CIC3	0.32820	427.00	1515.56	6.04	0.00000e+000	2.68972e+001
2-CIC3	0.24717	308.90	867.10	9.48	0.00000e+000	1.84319e+000
3-CI-1-C3=	0.22836	391.15	1388.40	6.41	0.00000e+000	1.13703e+001
1-CIC4	0.22650	351.60	890.70	9.64	0.00000e+000	-2.61472e+000
2-CIC4	0.29199	341.40	872.00	9.75	0.00000e+000	-3.43528e+000
2-CI-2-M-C3	0.19990	322.00	842.00	9.90	0.00000e+000	-3.93341e+000
1-CI-3-M-C4	0.29300	371.70	875.22	9.99	-5.52857e-006	-2.50092e+000
2-CI-2-M-C4	0.23300	358.80	890.79	9.70	-8.78002e-006	-1.08506e+001
Chloroprene	0.35509	332.55	961.93	8.76	3.07184e-006	2.06936e+001
PerCI13C4==	0.15500	488.15	1567.41	6.11	1.81654e-005	1.01357e+002
1-CIC5	0.43700	380.20	887.82	9.93	-1.74494e-007	-1.90594e+000
Br-F5-BZ	0.35499	410.00	1920.03	4.71	0.00000e+000	6.79175e+000
CI-BZ	0.24605	404.90	1106.00	8.14	0.00000e+000	-3.39106e+001
12-CI-BZ	0.27200	452.00	1450.03	6.44	0.00000e+000	-1.43091e+001
13-CI-BZ	0.27898	446.23	1294.54	7.18	0.00000e+000	-1.03558e+001
14-CI-BZ	0.28464	447.21	1252.08	7.43	0.00000e+000	-1.04813e+001
124TriCIBZ	0.64834	486.15	1459.44	6.55	-6.80308e-007	1.97273e+000
PerCI-BZ	0.54300	582.60	1556.39	6.53	-3.55617e-006	5.43784e+001
CI-F5-BZ	0.40000	391.10	1997.54	4.45	0.00000e+000	8.07079e+000
CF4	0.17700	145.10	1606.00	3.98	0.00000e+000	1.39883e+001
12-F-BZ	0.32000	364.70	1163.44	7.47	-2.18510e-006	-2.44979e+001
CI2-F4-BZ	0.62199	430.90	1566.18	5.87	0.00000e+000	1.48836e+001
135-CI-F3-BZ	0.42598	471.50	1647.51	5.75	0.00000e+000	2.16991e+001
AcetylCI	0.34400	323.90	1104.00	7.57	0.00000e+000	2.50362e+001
AllylCI	0.12996	318.30	937.00	8.86	0.00000e+000	2.53067e+000
VinylFI	0.15700	201.00	654.28	10.89	0.00000e+000	2.04918e+001
Br2-F2-C1	0.17700	298.00	2462.00	3.30	0.00000e+000	2.95984e+001
Fluoroform	0.59352	191.00	877.14	7.99	0.00000e+000	8.16002e+000
F-C1	0.18510	194.70	422.52	16.69	0.00000e+000	1.38289e+001
F2-C1	0.41563	221.50	994.07	7.40	0.00000e+000	1.17976e+001
12-Br-F4-C2	0.24500	320.40	2174.96	3.83	0.00000e+000	6.60488e+001
C2-CI-F5	0.27900	235.20	1369.69	5.48	-1.31899e-006	2.78297e+001
perF-C2	0.24514	194.90	1590.00	4.44	0.00000e+000	2.68362e+001
perF-C2=	0.22300	197.20	1031.13	6.87	0.00000e+000	2.90277e+001
11-FC2=	0.14000	187.50	697.34	9.98	0.00000e+000	3.07486e+000
F-C2	0.21500	235.50	730.03	10.29	0.00000e+000	4.34871e+000
perF-C3	0.32499	236.50	1369.31	5.49	0.00000e+000	3.66387e+001
F3-C3=	0.23800	243.00	863.98	8.79	0.00000e+000	3.54832e+000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
1122-CIC2	1.62653e-001	-9.91931e-005	2.57160e-008	-2.54228e-025	1.00000e+000	-0.06391
1122CI12FC2	2.64262e-001	-2.18928e-004	6.86463e-008	1.64653e-025	1.00000e+000	-0.27555
CI-1122-FC2	9.69882e-002	-5.04918e-005	1.01410e-008	-1.03353e-025	1.00000e+000	0.01578
CI5-C2	1.68808e-001	-1.11934e-004	3.03443e-008	7.14927e-026	1.00000e+000	-0.01972
1-ci2-CIC2=	1.17973e-001	-7.00432e-005	1.81167e-008	-1.00336e-025	1.00000e+000	-0.01346
1-tr2-CIC2=	1.05066e-001	-5.88367e-005	1.45189e-008	1.46833e-026	1.00000e+000	-0.00845
111-CIC2	8.22776e-002	-3.17041e-005	4.85865e-009	-8.75574e-026	1.00000e+000	0.35857
1-CIC3	1.81420e-001	-8.36526e-005	1.86320e-008	-9.12031e-026	1.00000e+000	0.03585
12-CIC3	1.82865e-001	-8.68562e-005	1.93648e-008	6.84520e-026	1.00000e+000	-0.06104
13-CIC3	1.68662e-001	-7.64869e-005	1.61910e-008	7.98247e-020	1.00000e+000	0.35530
22-CIC3	2.04857e-001	-1.12299e-004	2.78361e-008	1.16161e-019	1.00000e+000	0.34969
123-CIC3	1.81218e-001	-9.29600e-005	2.19840e-008	-1.11651e-025	1.00000e+000	0.36372
2-CIC3	1.74514e-001	-7.48467e-005	1.46642e-008	-1.34822e-025	1.00000e+000	0.29473
3-CI-1-C3=	2.07503e-001	-1.31769e-004	3.52003e-008	-2.20254e-026	1.00000e+000	0.35654
1-CIC4	2.24989e-001	-9.79658e-005	2.02156e-008	3.27148e-025	1.00000e+000	0.07140
2-CIC4	2.28098e-001	-9.94302e-005	2.06531e-008	4.20619e-026	1.00000e+000	-0.07186
2-CI-2-M-C3	2.32753e-001	-9.62625e-005	1.96900e-008	0.00000e+000	1.00000e+000	-0.10557
1-CI-3-M-C4	2.79631e-001	-1.24311e-004	2.59064e-008	1.29159e-019	1.00000e+000	0.37201
2-CI-2-M-C4	2.91550e-001	-1.28538e-004	2.56464e-008	2.04485e-019	1.00000e+000	0.34452
Chloroprene	1.55777e-001	-7.96183e-005	2.29831e-008	-2.90748e-012	1.00000e+000	0.25700
PerCI13C4==	1.40891e-001	-1.01442e-004	3.92139e-008	-6.28604e-012	1.00000e+000	0.09580
1-CIC5	2.67682e-001	-1.10719e-004	2.10508e-008	4.82822e-021	1.00000e+000	0.40770
Br-F5-BZ	2.36439e-001	-1.03259e-004	1.80065e-008	1.12215e-025	1.00000e+000	-0.01309
CI-BZ	2.81724e-001	-1.50826e-004	3.56718e-008	-2.27303e-026	1.00000e+000	0.00642
12-CI-BZ	2.75479e-001	-1.50531e-004	3.57479e-008	2.22653e-025	1.00000e+000	-0.01335
13-CI-BZ	2.73886e-001	-1.63723e-004	5.55061e-008	-8.04437e-012	1.00000e+000	0.09814
14-CI-BZ	2.73590e-001	-1.62885e-004	5.49139e-008	-7.90541e-012	1.00000e+000	-0.00263
124TriCIBZ	2.85883e-001	-1.85903e-004	6.85042e-008	-1.07868e-011	1.00000e+000	0.06964
PerCI-BZ	2.71938e-001	-1.71862e-004	4.45890e-008	8.16041e-020	1.00000e+000	0.46352
CI-F5-BZ	2.30976e-001	-9.86909e-005	1.68097e-008	-2.76051e-025	1.00000e+000	-0.03533
CF4	1.01366e-001	-5.41998e-005	1.12896e-008	2.42149e-025	1.00000e+000	0.77719
12-F-BZ	2.79585e-001	-1.47411e-004	3.41384e-008	5.26606e-020	1.00000e+000	0.37812
CI2-F4-BZ	2.28187e-001	-9.90000e-005	1.71341e-008	3.92447e-025	1.00000e+000	0.01636
135-CI-F3-BZ	2.32633e-001	-9.93037e-005	1.74588e-008	1.36685e-025	1.00000e+000	-0.01071
AcetylCI	8.56036e-002	-3.28718e-005	5.55096e-009	-3.28940e-025	1.00000e+000	0.01822
AllylCI	1.52449e-001	-7.59824e-005	1.82442e-008	-1.08180e-025	1.00000e+000	-0.01614
VinylFI	5.96065e-002	-1.22315e-005	-4.89731e-010	2.27813e-025	1.00000e+000	0.28830
Br2-F2-C1	1.03165e-001	-6.52856e-005	1.56302e-008	-2.14507e-025	1.00000e+000	0.25023
Fluoroform	9.07095e-002	-4.59948e-005	9.85125e-009	4.59518e-026	1.00000e+000	0.12580
F-C1	4.31079e-002	-6.90775e-006	-4.96562e-010	1.58077e-025	1.00000e+000	-0.00174
F2-C1	5.90870e-002	-1.61538e-005	5.31564e-010	1.20818e-025	1.00000e+000	0.12375
12-Br-F4-C2	1.37511e-001	-8.32716e-005	2.03824e-008	5.44381e-025	1.00000e+000	0.12533
C2-CI-F5	1.74596e-001	-9.63655e-005	2.03469e-008	2.95569e-020	1.00000e+000	0.41777
perF-C2	1.73007e-001	-9.56931e-005	2.03499e-008	-1.35872e-025	1.00000e+000	0.33083
perF-C2=	1.13918e-001	-6.79057e-005	1.69550e-008	2.09549e-025	1.00000e+000	0.51077
11-FC2=	1.22329e-001	-7.00108e-005	1.75639e-008	2.90965e-026	1.00000e+000	0.49112
F-C2	1.09071e-001	-3.88912e-005	6.02870e-009	6.55131e-026	1.00000e+000	-0.03601
perF-C3	2.40580e-001	-1.29507e-004	2.72980e-008	8.02106e-025	1.00000e+000	0.00000
F3-C3=	2.37757e-001	-1.19013e-004	2.37391e-008	5.04331e-025	1.00000e+000	0.05893

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
1122-ClC2	-0.35477	Halogen	-834638
1122Cl12FC2	-0.81519	Halogen	-51615.3
Cl-1122-FC2	-0.29484	Halogen	
Cl5-C2	-0.46744	Halogen	-7182110
1-ci2-CIC2=	-0.16560	Halogen	-994491
1-tr2-CIC2=	-0.18366	Halogen	-999130
111-CIC2	0.49043	Halogen	-691998
1-CIC3	-0.13898	Halogen	-1864500
12-CIC3	-0.44435	Halogen	-1704500
13-CIC3	0.47293	Halogen	
22-CIC3	0.49207	Halogen	
123-CIC3	0.47124	Halogen	-1553500
2-CIC3	0.08702	Halogen	-1854790
3-Cl-1-C3=	0.49027	Halogen	-1760000
1-CIC4	-0.13174	Halogen	-2474170
2-CIC4	-0.36149	Halogen	-2465170
2-Cl-2-M-C3	-0.54455	Halogen	-2449070
1-Cl-3-M-C4	0.47093	Halogen	-163880
2-Cl-2-M-C4	0.47590	Halogen	
Chloroprene	-0.10579	Halogen	-2200000
PerCl13C4==	-0.52100	Halogen	-1484000
1-CIC5	0.45470	Halogen	-3085170
Br-F5-BZ	-0.32611	Halogen	
Cl-BZ	-0.24094	Halogen	-2976070
12-Cl-BZ	-0.18355	Halogen	-2824620
13-Cl-BZ	-0.08934	Halogen	-2825000
14-Cl-BZ	-0.23141	Halogen	-2801990
124TriClBZ	-0.37609	Halogen	-2656300
PerCl-BZ	0.45392	Halogen	
Cl-F5-BZ	-0.30134	Halogen	
CF4	-0.02093	Halogen	539685
12-F-BZ	0.47326	Halogen	
Cl2-F4-BZ	-0.60689	Halogen	-163880
135-Cl-F3-BZ	-0.40182	Halogen	
AcetylCl	-0.12578	Halogen	-876848
AllylCl	-0.15218	Halogen	-1760000
VinylFI	0.03288	Halogen	-100000
Br2-F2-C1	0.10638	Halogen	34400
Fluoroform	-0.05710	Halogen	178850
F-C1	-0.05079	Halogen	-521929
F2-C1	-0.24954	Halogen	-182620
12-Br-F4-C2	-0.25444	Halogen	194890
C2-Cl-F5	0.48374	Halogen	
perF-C2	-0.02717	Halogen	556999
perF-C2=	-0.61237	Halogen	-128000
11-FC2=	-0.12545	Halogen	-691998
F-C2	-0.14699	Halogen	-1110000
perF-C3	-0.55720	Halogen	523000
F3-C3=	-0.30996	Halogen	-99999.7

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
1-Cl-22-FC2=	1373	98.479	400.60	44.60000	0.19697	0.20969	0.21999
11122-FC3	1374	134.046	380.10	31.30000	0.27300	0.30298	0.30799
perF-C4	1375	238.024	386.40	23.20000	0.37799	0.40865	0.37400
perF-CC4	1376	200.026	388.50	27.80000	0.32400	0.34257	0.35600
perF-C5	1377	288.031	420.60	20.50000	0.47299	0.50651	0.43200
perF-BZ	1378	186.054	516.70	32.00000	0.33500	0.33546	0.39599
perF-C6	1379	338.044	448.80	16.60000	0.60600	0.58784	0.51397
perF-CC6	1380	300.045	457.20	24.30000	0.45899	0.51058	0.43200
perF-2-MC5	1381	338.044	452.00	18.10000	0.55000	0.54847	0.46399
perF-3-MC5	1382	338.044	450.00	16.80000	0.55000	0.55585	0.47600
perF-23-MC4	1383	338.044	462.00	18.60000	0.52499	0.52732	0.39399
F5-BZ	1384	168.063	531.00	35.20000	0.32400	0.32833	0.37299
14-F-BZ	1385	114.094	556.00	44.00000	0.29899	0.49314	0.29899
1234-F-BZ	1386	150.074	550.80	37.70000	0.31299	0.31510	0.34400
1235-F-BZ	1387	150.074	535.30	37.50000	0.31299	0.65118	0.34599
1245-F-BZ	1388	150.074	543.40	37.00000	0.31299	0.31926	0.35499
Fluoro-BZ	1389	96.104	560.10	45.50000	0.26899	0.27020	0.24400
p-F-Toluene	1390	110.126	590.60	38.20000	0.33750	0.33048	0.31100
AAAF-Toluene	1391	146.110	562.60	35.60000	0.36250	0.30524	0.32700
perF-Toluene	1392	236.061	534.50	27.10000	0.42800	0.44696	0.47499
perF-MCC6	1393	350.053	486.80	23.30000	0.56998	0.57336	0.49099
perF-C7	1394	388.049	474.80	16.10000	0.66399	0.65943	0.55598
23456-FBZCH	1395	182.091	566.50	31.30000	0.38400	0.39019	0.41499
perF-NP	1396	272.092	673.10	20.50000	0.54900	0.55176	0.41699
12ClCF3-BZ	1397	215.000	643.75	31.59600	0.46050	0.46110	0.43500
BF3	1398	67.810	260.90	49.85200	0.12360	0.11760	0.42970
TiCl4	1399	189.729	631.15	46.30500	0.30300	0.28880	0.29510
12FCF3-BZ	1400	182.093	541.85	31.03600	0.39849	0.42537	0.43299
1Cl2FCF3-BZ	1401	198.500	592.75	31.31500	0.42950	0.42886	0.43399
CH3Br	1402	94.939	464.00	65.00000	0.16511	0.15244	0.14422
Bromoform	1403	252.731	695.00	60.70000	0.28600	0.26271	0.15610
BromoC2	1404	108.966	503.80	62.31500	0.21492	0.20783	0.25330
12-BromoC2	1405	187.860	645.00	53.50000	0.22639	0.30375	0.79500
BromoC2=	1406	106.949	473.00	71.80000	0.20000	0.19289	0.28208
1-BromoC3	1407	123.000	535.50	48.20000	0.26550	0.26176	0.29400
2-BromoC3	1408	123.000	522.50	49.00000	0.25950	0.26586	0.26400
12-BromoC3	1409	201.889	634.10	54.10000	0.32150	0.32541	0.38400
1-BromoC4	1410	137.029	569.50	42.60000	0.32150	0.31959	0.33900
2-BromoC4	1411	137.029	558.70	42.00000	0.31550	0.31883	0.30800
12-BromoC4	1412	215.919	659.30	47.20000	0.37750	0.38355	0.42900
23-BromoC4	1413	215.919	657.00	47.70000	0.37150	0.38227	0.39700
2-Br-2-M-C3	1414	137.029	541.10	43.60000	0.31050	0.32059	0.24600
1-BromoC5	1415	151.059	564.80	37.70000	0.37750	0.37300	0.38400
BromoBZ	1416	157.020	670.10	45.20000	0.32350	0.32043	0.25100
CH3I	1417	141.938	525.00	65.90000	0.18424	0.17164	0.14462
CH2I2	1418	267.838	740.90	54.20000	0.26750	0.24691	0.18000
CHI3	1419	393.730	794.60	53.10000	0.34950	0.30660	0.19300
E-Iodide	1420	155.966	552.00	47.00000	0.27049	0.22532	0.15630
12-IodoC2	1421	281.859	749.90	47.30000	0.32350	0.26356	0.22300

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
1-Cl-22-FC2=	0.21999	254.60	1247.68	6.18	0.00000e+000	2.93358e+001
11122-FC3	0.30799	255.70	1164.25	6.63	0.00000e+000	-1.61523e+001
perF-C4	0.37400	271.20	1515.00	5.20	0.00000e+000	2.17300e+001
perF-CC4	0.35600	267.20	1533.56	5.11	0.00000e+000	4.56935e+001
perF-C5	0.43200	302.40	1522.06	5.36	0.00000e+000	-4.96332e+001
perF-BZ	0.39599	353.40	1626.43	5.29	0.00000e+000	3.63025e+001
perF-C6	0.51397	329.80	1628.90	5.16	0.00000e+000	-6.21693e+001
perF-CC6	0.43200	326.00	1647.18	5.08	0.00000e+000	-1.30270e+002
perF-2-MC5	0.46399	330.80	1733.00	4.86	0.00000e+000	-6.21693e+001
perF-3-MC5	0.47600	331.50	1709.06	4.93	0.00000e+000	-6.21693e+001
perF-23-MC4	0.39399	332.90	1791.63	4.71	0.00000e+000	-6.21693e+001
F5-BZ	0.37299	358.90	1507.93	5.73	0.00000e+000	-5.05633e+000
14-F-BZ	0.29899	362.00	679.93	12.75	0.00000e+000	-2.59766e+001
1234-F-BZ	0.34400	367.50	1411.18	6.17	0.00000e+000	-1.13658e+001
1235-F-BZ	0.34599	357.60	676.41	12.77	0.00000e+000	-1.13658e+001
1245-F-BZ	0.35499	363.40	1390.06	6.25	0.00000e+000	-1.13658e+001
Fluoro-BZ	0.24334	357.90	1030.18	8.38	0.00000e+000	-3.87546e+001
p-F-Toluene	0.31100	389.80	1001.46	8.87	-2.72580e-006	-3.36057e+001
AAAF-Toluene	0.32700	375.20	1422.31	6.17	-1.27625e-006	-4.04118e+001
perF-Toluene	0.47499	377.70	1601.43	5.49	0.00000e+000	-1.10733e+001
perF-MCC6	0.49099	349.50	1789.00	4.79	0.00000e+000	-1.42646e+002
perF-C7	0.55598	355.60	1733.00	4.97	0.00000e+000	-7.45361e+001
23456-FBZCH	0.41499	390.70	1421.93	6.25	0.00000e+000	-3.95019e+000
perF-NP	0.41699	482.00	1581.75	6.03	0.00000e+000	-9.95353e+000
12ClCF3-BZ	0.42460	445.15	1480.00	6.28	0.00000e+000	1.07996e+001
BF3	0.42970	173.35	1571.56	4.32	-2.77308e-008	2.21974e+001
TiCl4	0.29420	408.85	1735.00	5.20	-2.03780e-007	1.06481e+002
12FCF3-BZ	0.37940	375.15	1272.01	6.90	0.00000e+000	-2.79999e+000
1Cl2FCF3-BZ	0.43779	410.15	1440.00	6.28	0.00000e+000	3.99902e+000
CH3Br	0.14422	276.60	1673.53	4.74	-2.39893e-006	1.44299e+001
Bromoform	0.15610	422.45	2900.20	3.15	-1.15443e-007	3.32561e+001
BromoC2	0.25330	311.50	1469.38	5.61	1.87738e-007	2.58684e+001
12-BromoC2	0.79500	404.70	2188.79	4.11	-2.43722e-006	2.49997e+001
BromoC2=	0.28208	288.95	1523.18	5.28	0.00000e+000	1.95322e+001
1-BromoC3	0.29400	344.20	1361.18	6.26	2.13421e-006	3.26998e+000
2-BromoC3	0.26400	332.60	1318.39	6.39	1.09360e-006	3.07499e+000
12-BromoC3	0.38400	413.20	1940.75	4.67	-3.88051e-006	1.31869e+001
1-BromoC4	0.33900	374.80	1283.14	6.84	-6.41366e-006	2.26797e+000
2-BromoC4	0.30800	364.40	1267.93	6.85	-1.17046e-006	-4.19997e-002
12-BromoC4	0.42900	439.50	1801.81	5.13	-2.94388e-006	1.74129e+001
23-BromoC4	0.39700	434.20	1790.39	5.15	-9.87469e-007	6.07395e+000
2-Br-2-M-C3	0.24600	346.40	1227.00	6.96	-7.16360e-006	-8.83993e+000
1-BromoC5	0.38400	402.70	1222.84	7.35	-5.02185e-006	1.25399e+000
BromoBZ	0.25100	429.10	1500.93	6.11	-4.09430e-006	-2.83139e+001
CH3I	0.14462	315.70	2292.93	3.61	7.73277e-008	1.08099e+001
CH2I2	0.18000	455.20	3336.35	2.81	-4.57738e-007	2.18158e+001
CHI3	0.19300	491.20	4019.79	2.39	1.53084e-006	4.15511e+001
E-Iodide	0.15630	345.60	1960.59	4.35	1.38169e-006	1.01099e+001
12-IodoC2	0.22300	473.20	3335.70	2.84	1.09553e-006	2.58929e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
1-Cl-22-FC2=	9.37344e-002	-4.65164e-005	9.48886e-009	-1.76502e-025	1.00000e+000	0.19366
11122-FC3	2.67478e-001	-1.36360e-004	3.84967e-008	2.70704e-026	1.00000e+000	0.01552
perF-C4	3.67645e-001	-2.19870e-004	5.23312e-008	1.44206e-025	1.00000e+000	0.42397
perF-CC4	2.43994e-001	-1.27194e-004	2.65479e-008	-3.13061e-025	1.00000e+000	0.20970
perF-C5	5.52919e-001	-3.11376e-004	6.56702e-008	1.01793e-025	1.00000e+000	-0.00171
perF-BZ	2.63518e-001	-1.51665e-004	3.64232e-008	3.75733e-025	1.00000e+000	0.22754
perF-C6	6.60612e-001	-3.73055e-004	7.88194e-008	3.41337e-025	1.00000e+000	0.13605
perF-CC6	6.90932e-001	-3.76088e-004	7.69369e-008	-3.86284e-025	1.00000e+000	0.00698
perF-2-MC5	6.60612e-001	-3.73055e-004	7.88194e-008	3.41337e-025	1.00000e+000	-0.01591
perF-3-MC5	6.60612e-001	-3.73055e-004	7.88194e-008	3.41337e-025	1.00000e+000	-0.01934
perF-23-MC4	6.60612e-001	-3.73055e-004	7.88194e-008	3.41337e-025	1.00000e+000	-0.01134
F5-BZ	2.34877e-001	-9.91921e-005	1.68614e-008	-1.40003e-025	1.00000e+000	-0.00723
14-F-BZ	2.86287e-001	-1.56004e-004	3.68991e-008	-4.03219e-026	1.00000e+000	0.08917
1234-F-BZ	2.36000e-001	-1.00004e-004	1.72383e-008	-6.81912e-026	1.00000e+000	-0.00504
1235-F-BZ	2.36000e-001	-1.00004e-004	1.72383e-008	-6.81912e-026	1.00000e+000	0.12392
1245-F-BZ	2.36000e-001	-1.00004e-004	1.72383e-008	-6.81912e-026	1.00000e+000	-0.00350
Fluoro-BZ	2.83635e-001	-1.47898e-004	3.38970e-008	-8.24838e-026	1.00000e+000	-0.01666
p-F-Toluene	3.11467e-001	-1.47410e-004	3.10335e-008	6.27140e-020	1.00000e+000	0.37686
AAAF-Toluene	3.65703e-001	-1.95251e-004	4.52869e-008	2.97297e-020	1.00000e+000	0.33993
perF-Toluene	3.41453e-001	-1.60071e-004	2.96325e-008	3.27746e-025	1.00000e+000	-0.01246
perF-MCC6	7.98628e-001	-4.37741e-004	9.00851e-008	3.53463e-026	1.00000e+000	-0.00487
perF-C7	7.68306e-001	-4.34751e-004	9.19665e-008	-7.93455e-025	1.00000e+000	-0.02197
23456-FBZCH	3.21485e-001	-1.22529e-004	3.04471e-008	1.83865e-026	1.00000e+000	-0.01187
perF-NP	3.75136e-001	-1.61013e-004	2.75458e-008	4.67063e-025	1.00000e+000	-0.03177
12ClCF3-BZ	3.22823e-001	-1.71971e-004	3.86237e-008	-1.30257e-025	1.00000e+000	-0.01141
BF3	5.99192e-002	-3.00983e-005	6.18776e-009	-1.00889e-013	1.00000e+000	-0.01110
TiCl4	4.18392e-005	-3.29055e-005	-1.46322e-017	4.89585e-021	1.00000e+000	0.28570
12FCF3-BZ	3.27849e-001	-1.69306e-004	3.69243e-008	-2.57414e-025	1.00000e+000	-0.00187
1Cl2FCF3-BZ	3.25272e-001	-1.70598e-004	3.77650e-008	-2.70586e-025	1.00000e+000	-0.01166
CH3Br	5.45500e-002	-1.80030e-005	2.49996e-009	5.72568e-020	1.00000e+000	0.33100
Bromoform	8.76297e-002	-6.53615e-005	2.69922e-008	-4.67717e-012	1.00000e+000	0.21912
BromoC2	6.12498e-002	1.98470e-005	-2.76059e-008	7.11376e-012	1.00000e+000	0.06233
12-BromoC2	1.25848e-001	-6.10987e-005	1.41148e-008	5.50813e-020	1.00000e+000	0.60056
BromoC2=	7.05115e-002	-1.82498e-005	-3.73537e-009	2.29589e-012	1.00000e+000	-0.06788
1-BromoC3	1.68958e-001	-7.18063e-005	1.42754e-008	-4.99247e-020	1.00000e+000	0.38912
2-BromoC3	1.75499e-001	-7.70396e-005	1.55454e-008	-2.66786e-020	1.00000e+000	0.39351
12-BromoC3	1.88199e-001	-9.20022e-005	2.04758e-008	9.05405e-020	1.00000e+000	0.43276
1-BromoC4	2.16698e-001	-9.01822e-005	1.73451e-008	1.49737e-019	1.00000e+000	0.39933
2-BromoC4	2.25098e-001	-9.57022e-005	1.87594e-008	2.45155e-020	1.00000e+000	0.39535
12-BromoC4	2.26622e-001	-1.04656e-004	2.20145e-008	6.79396e-020	1.00000e+000	0.43828
23-BromoC4	2.47102e-001	-1.18795e-004	2.54366e-008	2.64517e-020	1.00000e+000	0.43501
2-Br-2-M-C3	2.64572e-001	-1.33895e-004	3.07442e-008	1.66482e-019	1.00000e+000	0.38914
1-BromoC5	2.64427e-001	-1.08599e-004	2.04288e-008	1.17314e-019	1.00000e+000	0.38479
BromoBZ	2.66289e-001	-1.34906e-004	2.99244e-008	9.60052e-020	1.00000e+000	0.36858
CH3I	6.94494e-002	-3.46993e-005	8.71489e-009	-2.20606e-021	1.00000e+000	0.33125
CH2I2	7.91890e-002	-4.67455e-005	1.23028e-008	1.11320e-020	1.00000e+000	0.32419
CHI3	7.66293e-002	-5.18086e-005	1.45884e-008	-3.45892e-020	1.00000e+000	0.32775
E-Iodide	1.12649e-001	-4.60658e-005	8.82740e-009	-3.33331e-020	1.00000e+000	0.29228
12-IodoC2	1.17454e-001	-5.61221e-005	1.22904e-008	-2.70204e-020	1.00000e+000	0.30138

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
1-Cl-22-FC2=	-0.49516	Halogen	-579004
11122-FC3	-0.32681	Halogen	
perF-C4	-0.64240	Halogen	569999
perF-CC4	-0.43191	Halogen	-46100
perF-C5	-0.42271	Halogen	
perF-BZ	-0.68120	Halogen	-1369450
perF-C6	-0.65846	Halogen	
perF-CC6	-0.43676	Halogen	
perF-2-MC5	-0.42081	Halogen	
perF-3-MC5	-0.43127	Halogen	
perF-23-MC4	-0.36732	Halogen	
F5-BZ	-0.35400	Halogen	
14-F-BZ	-0.40259	Halogen	
1234-F-BZ	-0.32767	Halogen	
1235-F-BZ	-0.48216	Halogen	
1245-F-BZ	-0.34182	Halogen	
Fluoro-BZ	-0.24537	Halogen	-2814500
p-F-Toluene	0.47272	Halogen	
AAAF-Toluene	0.45895	Halogen	-2740500
perF-Toluene	-0.44494	Halogen	
perF-MCC6	-0.45429	Halogen	
perF-C7	-0.48647	Halogen	
23456-FBZCH	-0.38804	Halogen	
perF-NP	-0.38378	Halogen	
12ClCF3-BZ	-0.40233	Halogen	-163880
BF3	-0.34950	Halogen	
TiCl4	0.09090	Halogen	
12FCF3-BZ	-0.42697	Halogen	-163880
1Cl2FCF3-BZ	-0.39941	Halogen	-163880
CH3Br	0.51349	Halogen	
Bromoform	-0.06407	Halogen	-439730
BromoC2	-0.18492	Halogen	-1284400
12-BromoC2	0.52361	Halogen	
BromoC2=	-0.19036	Halogen	-1212690
1-BromoC3	0.48621	Halogen	
2-BromoC3	0.49352	Halogen	-1886150
12-BromoC3	0.48503	Halogen	
1-BromoC4	0.47686	Halogen	
2-BromoC4	0.48172	Halogen	
12-BromoC4	0.47554	Halogen	
23-BromoC4	0.47997	Halogen	
2-Br-2-M-C3	0.49303	Halogen	
1-BromoC5	0.44110	Halogen	
BromoBZ	0.48687	Halogen	
CH3I	0.51125	Halogen	
CH2I2	0.49758	Halogen	
CHI3	0.49578	Halogen	
E-Iodide	0.49038	Halogen	
12-IodoC2	0.47920	Halogen	

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	ID	Mol. Wt.	Critical Temperature (C)	Critical Pressure (bar_g)	Critical Volume (m3/kgmole)	Char. Volume (m3/kgmole)	Accentric Factor
12-IodoC3	1422	295.890	780.50	42.10000	0.37350	0.37437	0.23700
1-IodoC3	1423	170.009	589.40	42.70000	0.29150	0.28490	0.22400
2-IodoC3	1424	170.009	574.60	43.20000	0.28550	0.28733	0.19500
IodoBZ	1425	204.020	721.10	45.20000	0.35100	0.34580	0.24900
Epichlorhydrn	1426	92.525	600.00	49.00000	0.23300	0.23334	0.25620
oNitroClBZ	1427	157.554	757.00	39.70000	0.43200	0.46875	0.48640
mNitroClBZ	1428	157.554	742.00	39.70000	0.43200	0.42577	0.49190
pNitroClBZ	1429	157.554	750.00	39.70000	0.43200	0.38522	0.48740
24Nitro1ClBZ	1430	202.554	813.77	34.70000	0.47800	0.44602	0.73190
FeCl3	1431	162.210	1231.00	27.96200	0.48340	0.16760	-0.31610
BrTriClC1	1432	198.272	606.00	49.70000	0.28400	0.28937	0.19198
DiBrDiFC1	1433	209.815	478.00	40.70000	0.24900	0.24133	0.10832
CarbnylFlrde	1434	66.007	297.00	57.60000	0.14100	0.15330	0.28294
BromoClC1	1435	129.384	557.00	68.10000	0.18800	0.19155	0.22044
DiBromoC1	1436	173.835	611.00	71.70000	0.22300	0.20512	0.20945
11ClTetraFC2	1437	170.921	418.55	33.00000	0.29400	0.29429	0.25326
1112ClF2C2	1438	203.830	552.00	33.40000	0.35100	0.33897	0.25606
2Cl1112FC2	1439	136.475	395.65	35.40000	0.24600	0.24447	0.27353
12Cl1112FC2	1440	152.929	461.60	36.10000	0.27800	0.27635	0.24101
1122BromoC2	1441	345.653	824.00	46.00000	0.40100	0.36889	0.17703
111ClFC2	1442	151.393	565.00	39.90000	0.29400	0.27738	0.25008
1112ClC2	1443	167.848	624.00	40.20000	0.32500	0.32532	0.24220
1122FC2	1444	102.027	391.00	37.70000	0.19100	0.18624	0.18498
VinylBromide	1445	106.946	473.00	71.80000	0.20000	0.19289	0.28208
11ClFC2	1446	116.946	477.30	44.00000	0.25400	0.25582	0.24325
23ClC3=	1447	110.970	577.00	43.80000	0.27700	0.26538	0.20608
2ClC3=	1448	76.525	478.00	47.10000	0.23400	0.22572	0.15251
11ClC3	1449	112.986	560.00	42.40000	0.29100	0.28900	0.25293
2BromoC3	1450	122.989	532.00	55.10000	0.26600	0.26946	0.24319
2C3Chloride	1451	78.541	489.00	45.40000	0.24700	0.24903	0.22399
2C3Iodide	1452	169.992	578.00	51.20000	0.29000	0.29072	0.23799
Cl613C4==	1453	260.760	738.00	28.40000	0.55000	0.47291	0.16836
13Cltrns2C4=	1454	124.997	618.00	37.80000	0.32500	0.32137	0.24181
14Clcis2C4=	1455	124.997	640.00	37.80000	0.34300	0.32225	0.33056
14Cltrns2C4=	1456	124.997	646.00	37.80000	0.33000	0.32355	0.33334
34Cl1C4=	1457	124.997	589.00	38.50000	0.33000	0.32282	0.30021
14ClC4	1458	127.013	641.00	36.10000	0.34300	0.34207	0.32215
15ClC5	1459	141.039	663.00	31.90000	0.42200	0.40412	0.38512
1ClC5	1460	106.595	568.00	33.50000	0.35200	0.35886	0.33393
135ClBZ	1461	181.447	718.00	37.20000	0.42500	0.40499	0.35956
mDiBromoBZ	1462	235.906	761.00	46.60000	0.37200	0.38390	0.29324
BenzoTriF	1463	146.110	559.90	32.10000	0.35600	0.36061	0.29981
BZylDiCl	1464	161.029	731.00	36.50000	0.40400	0.40880	0.32639
pBromToluene	1465	171.037	699.00	43.70000	0.37900	0.38404	0.31793
oClToluene	1466	126.583	656.00	39.10000	0.35400	0.36009	0.30444
pClToluene	1467	126.583	660.00	39.10000	0.36000	0.36634	0.31226
1BromoC7	1468	179.100	651.00	30.80000	0.47700	0.50115	0.44348
1BrNaphthaln	1469	207.070	824.00	37.00000	0.45300	0.46070	0.36925
1ClNaphthaln	1470	162.617	785.00	34.00000	0.43400	0.45382	0.38273

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	SRK Accentric Factor	Norm. Boiling Point (K)	Standard Density (kg/m3)	Watson Factor	Enthalpy Term A (kJ/kgmole)	Enthalpy Term B (kJ/kgmole/K)
12-IodoC3	0.23700	500.20	2494.95	3.87	9.69534e-007	1.63860e+001
1-IodoC3	0.22400	375.60	1752.66	5.01	-2.84423e-006	1.20519e+001
2-IodoC3	0.19500	362.60	1711.90	5.07	-3.15460e-007	4.87496e+000
IodoBZ	0.24900	461.60	1837.57	5.12	-2.47454e-006	-2.47807e+001
Epichlorhydrn	0.25620	389.26	1186.08	7.49	1.21769e-005	-2.84579e+001
oNitroClBZ	1.10679	519.00	1375.31	7.11	-2.50005e-007	4.21956e+000
mNitroClBZ	0.84625	508.85	1376.69	7.05	-3.80899e-006	9.30196e-001
pNitroClBZ	0.48109	515.15	1359.34	7.17	-1.82476e-006	1.52514e+000
24Nitro1ClBZ	0.50431	587.00	1553.59	6.56	-9.72849e-005	1.60000e+001
FeCl3	-0.31610	605.00	2799.45	3.68	-2.21047e+004	6.87543e+001
BrTriClC1	0.19198	378.05	2012.28	4.37	0.00000e+000	2.31871e+001
DiBrDiFC1	0.10832	295.94	2304.28	3.52	0.00000e+000	2.16942e+001
CarbnylFlrde	0.28294	188.58	697.71	10.00	0.00000e+000	2.39751e+001
BromoClC1	0.22044	341.20	1947.01	4.37	0.00000e+000	2.78132e+001
DiBromoC1	0.20945	370.10	2505.64	3.49	0.00000e+000	2.80299e+001
11ClTetraFC2	0.25326	276.17	1487.93	5.32	0.00000e+000	1.97390e+001
1112ClFC2	0.25606	364.65	1697.56	5.12	0.00000e+000	2.14739e+001
2Cl1112FC2	0.27353	261.05	1385.75	5.61	0.00000e+000	2.09757e+001
12Cl112FC2	0.24101	301.15	1488.81	5.48	0.00000e+000	1.97577e+001
1122BromoC2	0.17703	516.65	2940.32	3.32	0.00000e+000	4.92442e+001
111ClFC2	0.25008	366.00	1592.30	5.47	0.00000e+000	1.94794e+001
1112ClC2	0.24220	403.65	1547.43	5.81	0.00000e+000	2.56054e+001
1122FC2	0.18498	250.15	1323.44	5.79	0.00000e+000	2.62793e+001
VinylBromide	0.28208	288.95	1523.18	5.28	0.00000e+000	1.95317e+001
11ClFC2	0.24325	305.15	1249.43	6.56	0.00000e+000	1.41695e+001
23ClC3=	0.20608	365.75	1214.52	7.16	0.00000e+000	3.01585e+001
2ClC3=	0.15251	295.80	907.67	8.93	0.00000e+000	3.47175e+001
11ClC3	0.25293	361.25	1138.14	7.61	0.00000e+000	3.77482e+001
2BromoC3	0.24319	332.56	1302.13	6.47	0.00000e+000	3.10095e+001
2C3Chloride	0.22399	308.85	867.04	9.48	0.00000e+000	4.73303e+001
2C3Iodide	0.23799	362.65	1713.03	5.06	0.00000e+000	3.12544e+001
Cl613C4==	0.16836	486.15	1689.06	5.66	0.00000e+000	9.97152e+001
13Cltrns2C4=	0.24181	402.00	1163.33	7.72	0.00000e+000	3.34085e+001
14Clcis2C4=	0.33056	425.65	1198.96	7.63	0.00000e+000	1.24962e+000
14Cltrns2C4=	0.33334	429.26	1198.06	7.66	0.00000e+000	4.61714e+000
34Cl1C4=	0.30021	388.00	1159.30	7.65	0.00000e+000	4.57515e+001
14ClC4	0.32215	427.05	1145.65	8.00	0.00000e+000	-3.06700e+000
15ClC5	0.38512	453.15	1105.18	8.45	0.00000e+000	1.60591e+000
1ClC5	0.33393	381.54	886.91	9.95	0.00000e+000	2.38546e+001
135ClBZ	0.35956	481.55	1386.06	6.88	0.00000e+000	8.84975e-001
mDiBromoBZ	0.29324	491.15	1959.64	4.90	0.00000e+000	2.45668e+001
BenzoTriF	0.29981	375.20	1193.56	7.35	0.00000e+000	-2.94049e+000
BZylDiCl	0.32639	487.00	1256.67	7.62	0.00000e+000	-2.47508e+001
pBromToluene	0.31793	457.50	1397.17	6.71	0.00000e+000	-9.36060e+000
oClToluene	0.30444	432.30	1086.19	8.47	0.00000e+000	-1.02981e+001
pClToluene	0.31226	435.65	1071.56	8.61	0.00000e+000	-1.02981e+001
1BromoC7	0.44348	452.05	1144.44	8.16	0.00000e+000	-8.08329e+000
1BrNaphthaln	0.36925	554.25	1487.71	6.72	0.00000e+000	-4.72004e+001
1ClNaphthaln	0.38273	532.45	1179.18	8.36	0.00000e+000	-5.99943e+001

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Enthalpy Term C (kJ/kgmole/K ²)	Enthalpy Term D (kJ/kgmole/K ³)	Enthalpy Term E (kJ/kgmole/K ⁴)	Enthalpy Term F (kJ/kgmole/K ⁵)	Entropy Term	Viscosity A Term
12-IodoC3	1.82024e-001	-8.76823e-005	1.95434e-008	-2.33768e-020	1.00000e+000	0.35989
1-IodoC3	1.55479e-001	-6.02823e-005	1.05049e-008	6.60140e-020	1.00000e+000	0.35327
2-IodoC3	1.74382e-001	-7.68789e-005	1.56238e-008	6.59890e-021	1.00000e+000	0.35428
IodoBZ	2.66644e-001	-1.38036e-004	3.14244e-008	5.89200e-020	1.00000e+000	0.36706
Epichlohydrn	2.59703e-001	-1.89533e-004	8.20826e-008	-1.46925e-011	1.00000e+000	0.26728
oNitroClBZ	2.76107e-001	-1.25789e-004	2.25091e-008	2.64840e-013	1.00000e+000	-0.24046
mNitroClBZ	2.84305e-001	-1.34969e-004	2.72318e-008	-6.70896e-013	1.00000e+000	0.29613
pNitroClBZ	2.85218e-001	-1.36739e-004	2.83934e-008	-9.28586e-013	1.00000e+000	-0.11189
24Nitro1ClBZ	2.90710e-001	-1.25639e-004	2.11244e-008	1.20210e-018	1.00000e+000	-0.42100
FeCl3	2.29295e-002	-1.86011e-005	7.19502e-009	-1.01502e-012	1.00000e+000	0.00000
BrTriClC1	1.68557e-001	-1.81972e-004	9.92294e-008	-2.13077e-011	1.00000e+000	-0.07255
DiBrDiFC1	1.41661e-001	-1.34955e-004	6.79402e-008	-1.38561e-011	1.00000e+000	0.25966
CarbnylFlrde	4.15412e-002	9.20741e-008	-1.45948e-008	5.12557e-012	1.00000e+000	0.61297
BromoClC1	4.35041e-002	2.84821e-006	-1.47331e-008	4.72315e-012	1.00000e+000	-0.15003
DiBromoC1	5.28601e-002	-1.45029e-005	-2.53917e-009	1.68869e-012	1.00000e+000	-0.06258
11ClTetraFC2	2.30856e-001	-1.84581e-004	7.68372e-008	-1.29567e-011	1.00000e+000	0.14633
1112ClF2C2	2.52925e-001	-2.25316e-004	1.06201e-007	-2.04020e-011	1.00000e+000	0.23978
2Cl1112FC2	1.72712e-001	-1.04056e-004	3.03787e-008	-3.01651e-012	1.00000e+000	0.02498
12Cl1112FC2	1.94665e-001	-1.36513e-004	5.02565e-008	-7.50537e-012	1.00000e+000	0.07544
1122BromoC2	1.25004e-001	-6.51335e-005	1.38904e-008	-1.27542e-013	1.00000e+000	-0.66462
111ClFC2	1.95972e-001	-1.57090e-004	7.14988e-008	-1.38088e-011	1.00000e+000	-0.06679
1112ClC2	1.80727e-001	-1.35869e-004	5.84344e-008	-1.06979e-011	1.00000e+000	-0.08346
1122FC2	1.38646e-001	-7.89079e-005	2.56606e-008	-3.65849e-012	1.00000e+000	0.42313
VinylBromide	7.05095e-002	-1.82489e-005	-3.73523e-009	2.29579e-012	1.00000e+000	-0.06788
11ClFC2	1.70991e-001	-1.22117e-004	5.12126e-008	-9.26736e-012	1.00000e+000	0.07472
23ClC3=	1.30160e-001	-6.88088e-005	2.17289e-008	-2.93330e-012	1.00000e+000	-0.08515
2ClC3=	8.19232e-002	-6.72624e-006	-1.24864e-008	3.89279e-012	1.00000e+000	-0.01036
11ClC3	1.05879e-001	1.15891e-005	-3.75597e-008	1.16706e-011	1.00000e+000	-0.01224
2BromoC3	9.78186e-002	2.03244e-005	-4.02168e-008	1.17502e-011	1.00000e+000	-0.15426
2C3Chloride	3.49926e-002	1.09552e-004	-9.67052e-008	2.50587e-011	1.00000e+000	-0.04453
2C3Iodide	1.01238e-001	1.43817e-005	-3.62516e-008	1.07915e-011	1.00000e+000	-0.07206
Cl613C4==	1.43622e-001	-1.03436e-004	3.97239e-008	-6.31107e-012	1.00000e+000	-0.45349
13Cltrns2C4=	1.64315e-001	-7.42575e-005	1.96692e-008	-2.40066e-012	1.00000e+000	-0.12220
14Clcis2C4=	2.48969e-001	-1.45439e-004	5.35255e-008	-8.66259e-012	1.00000e+000	-0.18715
14Cltrns2C4=	2.27818e-001	-1.40567e-004	5.48678e-008	-9.61804e-012	1.00000e+000	-0.17944
34Cl1C4=	1.33379e-001	-5.20338e-005	2.97853e-008	-1.25665e-011	1.00000e+000	-0.06899
14ClC4	2.66777e-001	-1.59570e-004	6.12330e-008	-1.07585e-011	1.00000e+000	0.06699
15ClC5	3.01546e-001	-1.65491e-004	5.89330e-008	-9.80629e-012	1.00000e+000	-0.00348
1ClC5	1.97925e-001	-2.45105e-005	-2.65955e-008	9.59975e-012	1.00000e+000	-0.02696
135ClBZ	2.89664e-001	-1.91425e-004	7.21916e-008	-1.17086e-011	1.00000e+000	0.84408
mDiBromoBZ	1.79036e-001	-3.96721e-005	-2.07606e-008	9.67347e-012	1.00000e+000	-0.59763
BenzoTriF	2.67653e-001	-8.35030e-005	-9.56218e-009	8.68158e-012	1.00000e+000	-0.07019
BZylDiCl	3.31937e-001	-1.88542e-004	6.21574e-008	-9.03543e-012	1.00000e+000	-0.25216
pBromToluene	2.69799e-001	-1.13934e-004	2.05243e-008	-2.92711e-013	1.00000e+000	0.00763
oClToluene	2.35742e-001	-3.75943e-006	-9.82274e-008	4.36141e-011	1.00000e+000	-0.01939
pClToluene	2.35742e-001	-3.75943e-006	-9.82274e-008	4.36141e-011	1.00000e+000	-0.03883
1BromoC7	3.77054e-001	-1.59749e-004	2.97711e-008	7.94009e-013	1.00000e+000	0.03208
1BrNaphthaln	4.32246e-001	-2.52708e-004	8.44895e-008	-1.22274e-011	1.00000e+000	0.39462
1ClNaphthaln	4.61930e-001	-2.85645e-004	1.01916e-007	-1.57209e-011	1.00000e+000	-0.90288

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :

Component Database

Name	Viscosity B Term	Type	Heat of Combustion (kJ/kgmole)
12-IodoC3	0.48591	Halogen	
1-IodoC3	0.48798	Halogen	
2-IodoC3	0.49511	Halogen	-1919650
IodoBZ	0.48690	Halogen	
Epichlorhydrn	-0.18191	Halogen	-1660500
oNitroClBZ	-0.67740	Halogen	-2810000
mNitroClBZ	-0.10112	Halogen	-2810000
pNitroClBZ	-0.50954	Halogen	-2810000
24Nitro1ClBZ	-1.04691	Halogen	-2760000
FeCl3	1.00000	Halogen	
BrTriClC1	-0.44221	Halogen	-303000
DiBrDiFC1	0.10900	Halogen	34400
CarbonylFlrde	-0.32132	Halogen	245000
BromoClC1	-0.33031	Halogen	-544000
DiBromoC1	-0.19875	Halogen	
11ClTetraFC2	-0.43247	Halogen	139800
1112ClF2C2	-0.50959	Halogen	-488000
2Cl1112FC2	-0.24555	Halogen	16760
12Cl1112FC2	-0.28060	Halogen	-172400
1122BromoC2	-0.91991	Halogen	-911000
111ClFC2	-0.47488	Halogen	-692000
1112ClC2	-0.46723	Halogen	-837800
1122FC2	-0.77938	Halogen	-136400
VinylBromide	-0.19036	Halogen	-1212690
11ClFC2	-0.22452	Halogen	-784300
23ClC3=	-0.46240	Halogen	-1580000
2ClC3=	-0.22831	Halogen	-1760000
11ClC3	-0.27690	Halogen	-1720000
2BromoC3	-0.35970	Halogen	-1886150
2C3Chloride	-0.27040	Halogen	-1854790
2C3Iodide	-0.21638	Halogen	-1919650
Cl613C4==	-0.81807	Halogen	-1484000
13Cltrns2C4=	-0.41729	Halogen	-2180000
14Clcis2C4=	-0.42507	Halogen	-2331980
14Cltrns2C4=	-0.40899	Halogen	-2186950
34Cl1C4=	-0.42085	Halogen	-2200000
14ClC4	-0.28778	Halogen	-2319990
15ClC5	-0.38200	Halogen	-2926110
1ClC5	-0.31418	Halogen	-3085170
135ClBZ	0.09387	Halogen	-2667000
mDiBromoBZ	-0.83709	Halogen	-2886300
BenzoTriF	-0.32309	Halogen	-2740500
BZylDiCl	-0.47888	Halogen	-3440000
pBromToluene	-0.13570	Halogen	-3620000
oClToluene	-0.25008	Halogen	-3569990
pClToluene	-0.21633	Halogen	-3569990
1BromoC7	-0.26972	Halogen	-4330000
1BrNaphthaln	0.46491	Halogen	-4882420
1ClNaphthaln	-1.16745	Halogen	4836420

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	No	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		136.577		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	1,683.276		1
PSV-2113/2114	0.899	216.460	1,697.950	1,337.978	292.318		1
PSV-2121A	0.899	232.050	533.350	813.596	94.920		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.807		1
BDV-2134A	29.487	43.954	5,594.000		237.459		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.331		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.807		1
BDV-2151	29.487	43.950	5,594.000		65.039		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2134 B	29.487	43.954	5,594.000		229.561		
BDV-2132 C	3.987	25.000	0.000				
BDV-2141	29.487	43.950	5,594.000		66.662		
PSV-2121C	0.899	232.050	533.350	813.596	94.920		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
PSV-2271	0.899	248.740	204.200	448.578	36.341		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	162.793		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	0.899	232.050	533.350	813.596	94.920		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.807		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000			1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135B	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135C	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Default Scenario

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	No	22.000	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	No	62.000	59.89
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	No	62.000	59.4
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	No	22.000	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	61.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	No	62.000	60
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	No	62.000	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	36.92
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	53.620	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	6,670.180	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	1,337.978	281.951		1
PSV-2121A	0.899	232.050	533.350	994.088	99.406		1
PSV-2131A	2.199	119.210	1,401.500	1,428.736	81.617		1
BDV-2134A	10.493	51.966	775.600		35.888		
PSV-2122A/2123A	2.199	122.334	8,881.000	14,715.604	563.002		1
BDV-2134 C	10.487	55.872	775.600				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.493	42.610	1,897.000		28.698		
PSV-2131B	2.199	119.210	1,401.500	1,428.736	81.617		1
PSV-2132B/2133B	2.199	122.334	8,881.000	16,910.821			1
BDV-2151	30.493	41.540	3,960.000		59.864		
BDV-2134 B	10.493	51.966	775.600		35.105		
PSV-2121C	0.899	232.050	533.350	994.088	88.588		1
BDV-2132 C	30.487	60.650	1,533.000				
PSV-2271	0.899	248.740	204.200	976.517	33.917		1
BDV-2132 A	30.493	42.826	1,532.475		23.163		
BDV-2132 B	30.493	42.826	1,532.500		21.815		
PSV-2122C/2123C	2.199	122.334	8,881.000	14,715.604			1
PSV-2122B/2123B	2.199	122.334	8,881.000	14,715.604			1
PSV-2132C/2133C	2.199	122.334	8,881.000	16,910.821			1
PSV-2132A/2133A	2.199	122.334	8,881.000	16,910.821	215.289		1
XV-2110	3.987	33.512	144.100		15.722		
PSV-2121B	0.899	232.050	533.350	994.088	88.588		1
PSV-2131C	2.199	119.210	1,401.500	1,428.736	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	12,877.630	235.780	407,280.164
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	329,607.688
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	59.890	1.000	12,883.034	235.641	995,012.149
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	59.400	1.000	12,867.467	235.419	2,073,328.408
BDV-2134 B	0.000	Peng Robinson	60.000	0.999	12,877.630	235.745	407,280.164
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	60.000	1.000	11,077.300	215.820	942,625.937
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	60.000	1.000	12,877.630	235.780	804,727.357
BDV-2132 B	0.000	Peng Robinson	60.000	0.994	12,877.630	235.520	804,740.655
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	36.920	1.000	11,303.314	233.827	75,547.660
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	24.562		0.004486	0.031791	0.054427	0.642692
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	24.577		0.000222	0.031898	0.053973	0.646061
BDV-2134 B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2132 B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.138327	0.077770	0.008444	0.018703	0.007009	0.003796	0.006588
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.139039	0.078135	0.008454	0.018787	0.006999	0.003810	0.006623
BDV-2134 B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2132 B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BDV-Fire case

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.001968	0.000599	0.000299	0.000100	0.003001	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.001979	0.000603	0.000300	0.000100	0.003017	0.000000	0.000000
BDV-2134 B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2132 B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	No	22.000	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	No	62.000	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	No	62.000	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	No	22.000	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	61.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	No	62.000	60
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	No	62.000	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	19
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.493	53.780	723.000		38.673		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
BDV-2134 C	10.487	55.872	726.844				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.493	43.926	1,705.255		30.774		
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	30.493	43.630	3,557.000		64.315		
BDV-2134 B	10.493	53.780	723.000		38.673		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	3.987	61.206	1,377.656				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.493	44.090	1,378.000		24.868		
BDV-2132 B	30.493	43.926	1,378.000		24.868		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	15.130	205.500		22.421		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000		0.000		
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	12,192.334	234.235	408,905.638
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	308,887.867
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	12,192.334	234.235	964,437.415
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	60.000	1.000	12,196.091	234.100	2,012,339.855
BDV-2134 B	0.000	Model Default	60.000	1.000	12,192.334	234.235	408,905.638
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	60.000	1.000	11,077.300	215.820	847,106.798
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	60.000	1.000	12,192.334	234.235	779,352.655
BDV-2132 B	0.000	Model Default	60.000	1.000	12,192.334	234.235	779,352.655
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	19.000	1.000	10,536.326	231.280	100,427.413
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	21.558		0.000230	0.025261	0.046603	0.742924
BDV-2134 B	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
BDV-2132 B	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.114718	0.047542	0.003941	0.008157	0.003056	0.001453	0.002234
BDV-2134 B	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
BDV-2132 B	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Spurious blowdown case

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000545	0.000150	0.000071	0.000000	0.003115	0.000000	0.000000
BDV-2134 B	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
BDV-2132 B	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	No	22.000	21
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	21
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	No	62.000	21
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	No	62.000	21
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	No	22.000	21
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	21.987	21
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	No	62.000	21
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	No	62.000	21
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	19
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.493	12.695	793.551		36.451		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
BDV-2134 C	10.487	15.548	793.551				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.493	1.689	2,011.000		29.443		
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	30.493	1.411	4,189.000		61.509		
BDV-2134 B	10.493	12.695	793.600		36.454		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	10.487	21.250	1,624.960				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.493	1.689	1,624.960		23.791		
BDV-2132 B	30.493	1.689	1,624.960		23.791		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	15.130	205.500		20.861		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000		0.000		
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	21.000	1.000	10,551.721	229.000	388,414.986
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	21.000	1.000	11,493.771	228.759	289,530.703
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	21.000	1.000	10,551.721	229.000	984,313.241
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	21.000	1.000	10,554.339	228.862	2,050,870.329
BDV-2134 B	0.000	Model Default	21.000	1.000	10,551.721	229.000	388,439.079
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	21.000	1.000	9,764.227	211.628	880,732.341
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	21.000	1.000	10,551.721	229.000	795,360.469
BDV-2132 B	0.000	Model Default	21.000	1.000	10,551.721	229.000	795,360.469
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	19.000	1.000	10,536.326	231.280	100,427.413
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	21.558		0.000230	0.025261	0.046603	0.742924
BDV-2134 B	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
BDV-2132 B	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.114718	0.047542	0.003941	0.008157	0.003056	0.001453	0.002234
BDV-2134 B	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
BDV-2132 B	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : Cold shutdown case

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000545	0.000150	0.000071	0.000000	0.003115	0.000000	0.000000
BDV-2134 B	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
BDV-2132 B	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	No	10.890	284
PSV-2113/2114	V-2105	Pipe9	Relief Valve	No	10.890	182.5
PSV-2121A	V-2101A	Pipe10	Relief Valve	No	9.664	182.6
PSV-2131A	V-2102A	Pipe11	Relief Valve	No	26.620	208.3
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	No	10.890	182.6
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	3.600	280.620	37,247.000	60,897.456	2,906.772		1
PSV-2113/2114	3.600	148.600	1,046.000	24,935.613	173.692		1
PSV-2121A	3.600	148.600	342.900	429.918	63.910		1
PSV-2131A	8.800	178.930	982.270	1,101.343	57.203		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	16,140.676	563.002		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	29.487	43.950	5,594.000		101.146		
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	3.987	25.000	0.000				
PSV-2271	3.600	148.600	174.510	429.918	28.986		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	6.199	122.334	8,881.000	16,910.822	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	284.000	1.000	44,317.408	289.233	34,270,873.7...
PSV-2113/2114	0.000	Model Default	182.500	1.000	15,277.690	226.588	886,661.525
PSV-2121A	0.000	Model Default	182.600	1.000	15,281.175	226.596	290,731.931
PSV-2131A	0.000	Model Default	208.300	1.000	20,815.155	255.256	832,311.159
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	182.600	1.000	15,281.175	226.596	147,960.424
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Mole Fractions	48.166		0.525812	0.001000	0.015006	0.006002
PSV-2113/2114	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
PSV-2121A	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
PSV-2131A	Mole Fractions	24.565		0.009990	0.031968	0.053946	0.638362
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.015006	0.039016	0.011004	0.033013	0.042017	0.027011	0.136054
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.137862	0.076923	0.007992	0.018981	0.006993	0.003996	0.006993
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 1

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.074030	0.041016	0.026010	0.006002	0.000000	0.000000	0.002001
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.001998	0.000999	0.000000	0.000000	0.002997	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	No	10.890	182.6
PSV-2131A	V-2102A	Pipe11	Relief Valve	No	26.620	208.3
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	No	26.620	208.3
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	No	10.890	182.6
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	3.600	148.600	342.800	429.918	56.938		1
PSV-2131A	8.800	203.730	982.271	1,101.343	57.203		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2131B	8.800	203.727	982.271	1,101.343	57.203		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	29.487	43.950	5,594.000		101.146		
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	3.987	25.000	0.000				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	3.600	148.600	342.800	429.918	56.938		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	182.600	1.000	15,281.175	226.596	290,647.145
PSV-2131A	0.000	Model Default	208.300	1.000	20,815.155	255.256	832,312.006
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	208.300	1.000	20,815.155	255.256	832,312.006
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	182.600	1.000	15,281.175	226.596	290,647.145
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
PSV-2131A	Mole Fractions	24.565		0.009990	0.031968	0.053946	0.638362
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Mole Fractions	24.565		0.009990	0.031968	0.053946	0.638362
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.137862	0.076923	0.007992	0.018981	0.006993	0.003996	0.006993
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.137862	0.076923	0.007992	0.018981	0.006993	0.003996	0.006993
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 2

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.001998	0.000999	0.000000	0.000000	0.002997	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.001998	0.000999	0.000000	0.000000	0.002997	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	No	73.794	188
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	No	26.620	208.3
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	No	10.890	182.6
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	No	10.890	182.6
PSV-2131C	V-2102C	Pipe140	Relief Valve	No	26.620	208.3
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	6,667.284	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2141/2142	6.200	168.854	1,828.000	22,488.220	36.505		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2131B	8.800	203.720	982.271	1,101.343	57.203		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	29.487	43.950	5,594.000		101.146		
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2121C	3.600	148.600	342.900	429.918	56.955		1
BDV-2132 C	3.987	25.000	0.000				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	8.795	122.334	8,881.000	14,034.194			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	24.795	122.334	8,881.000	16,527.557			1
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	3.600	148.600	342.900	429.918	56.955		1
PSV-2131C	8.800	203.720	982.271	1,101.343	57.203		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2141/2142	0.000	Model Default	188.000	1.000	19,648.396	252.605	1,460,633.025
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	208.300	1.000	20,815.155	255.256	832,312.006
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	182.600	1.000	15,281.175	226.596	290,731.931
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	182.600	1.000	15,281.175	226.596	290,731.931
PSV-2131C	0.000	Model Default	208.300	1.000	20,815.155	255.256	832,312.006
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Mole Fractions	24.590		0.004000	0.032000	0.054000	0.643000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Mole Fractions	24.565		0.009990	0.031968	0.053946	0.638362
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Mole Fractions	18.023		0.999540	0.000070	0.000390	0.000000
PSV-2131C	Mole Fractions	24.565		0.009990	0.031968	0.053946	0.638362
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.138000	0.078000	0.008000	0.019000	0.007000	0.004000	0.007000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.137862	0.076923	0.007992	0.018981	0.006993	0.003996	0.006993
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.137862	0.076923	0.007992	0.018981	0.006993	0.003996	0.006993
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : FIRE-AREA 3

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.002000	0.001000	0.000000	0.000000	0.003000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.001998	0.000999	0.000000	0.000000	0.002997	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.001998	0.000999	0.000000	0.000000	0.002997	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	233
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	233
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	No	68.200	233
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
PSV-2132B/2133B	6.199	192.520	8,664.000	15,636.107			1
BDV-2151	29.487	43.950	5,594.000		101.146		
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	3.987	25.000	0.000				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
PSV-2132C/2133C	24.795	122.334	8,664.000	13,595.475			1
PSV-2132A/2133A	6.200	219.520	8,664.000	12,330.565	210.028		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	233.000	1.000	17,892.653	237.266	4,596,684.833
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132C/2133C	0.000	Model Default	233.000	1.000	17,892.653	237.266	4,596,684.833
PSV-2132A/2133A	0.000	Model Default	233.000	1.000	22,278.743	258.306	7,870,976.809
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET-PSV-2132/2133

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	No	24.200	204
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	203
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	204
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.200	198.130	8,664.000	11,802.298	549.245		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
BDV-2151	29.487	43.950	5,594.000		101.146		
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
BDV-2132 C	3.987	25.000	0.000				
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2122C/2123C	8.795	192.070	8,664.000	12,643.676			1
PSV-2122B/2123B	2.199	188.280	8,664.000	14,522.675			1
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PSV-2132A/2133A	6.199	89.620	8,664.000	17,625.583	210.028		1
XV-2110	3.987	25.000	0.000		0.000		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	204.000	1.000	20,533.222	254.755	7,254,292.158
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2122C/2123C	0.000	Model Default	203.000	1.000	16,679.469	234.796	4,285,013.547
PSV-2122B/2123B	0.000	Model Default	204.000	1.000	16,719.617	234.880	4,295,327.739
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	19,480.292	250.982	5,158,229.115
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	32.720		0.000000	0.000000	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.811073	0.188927	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : BLOCK OUTLET PSV-2122/2123

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	No	52.900	59.422
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	301.9
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	280
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	350.7
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	208.3
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	21.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	204
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	60
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	73.794	139
BDV-2141	V-2103	Pipe35	Control Valve	Yes	61.987	60
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	208.3
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	233
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	61.987	60
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	21.987	60
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	350.7
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	61.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	216
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	61.987	60
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	61.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	204
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	204
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	233
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	233
XV-2110	V-2105	Pipe78	Control Valve	Yes	5.087	36.92
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	350.7
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	208.3
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	50.900	58.343	18,887.886		341.673		
PSV-2111/2112	0.899	300.250	5,086.020	5,012.365	841.628		1
PSV-2113/2114	0.899	274.810	17,833.110	25,384.121	3,127.476		1
PSV-2121A	0.899	346.740	221.340	730.141	36.764		1
PSV-2131A	2.199	191.130	808.590	1,105.295	47.088		1
BDV-2134A	10.487	55.870	778.400		41.636		
PSV-2122A/2123A	2.199	188.280	8,664.000	11,851.234	549.245		1
BDV-2134 C	10.487	55.870	778.400				
PSV-2141/2142	3.987	112.000	17,252.490	0.000	323.732		1
BDV-2141	30.487	52.760	1,722.000		31.076		
PSV-2131B	2.199	191.130	808.590	1,105.295	47.088		1
PSV-2132B/2133B	6.199	192.520	8,664.000	12,414.670			1
BDV-2151	30.487	43.950	3,236.000		58.511		
BDV-2134 B	10.487	55.870	778.400		41.636		
PSV-2121C	0.899	346.740	221.340	730.141	36.764		1
BDV-2132 C	30.487	52.760	1,333.800				
PSV-2271	0.899	213.480	505.800	835.035	84.012		1
BDV-2132 A	30.487	52.760	1,333.800		24.070		
BDV-2132 B	30.487	52.760	1,333.800		24.070		
PSV-2122C/2123C	2.199	188.280	8,664.000	11,851.234			1
PSV-2122B/2123B	2.199	188.280	8,664.000	11,851.234			1
PSV-2132C/2133C	6.199	192.520	8,664.000	12,414.670			1
PSV-2132A/2133A	6.199	192.520	8,664.000	12,414.670	210.028		1
XV-2110	2.037	29.000	1,971.000		215.043		
PSV-2121B	0.899	346.740	221.340	730.141	36.764		1
PSV-2131C	2.199	191.130	808.590	1,105.295	47.088		1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :
Scenario : PCV-2152

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
Job Code :
Project : BINAK
Description :
Scenario : PCV-2152

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	59.422	1.000	12,850.197	235.698	9,897,206.944
PSV-2111/2112	0.000	Model Default	301.900	1.000	26,700.872	266.489	5,537,618.253
PSV-2113/2114	0.000	Model Default	280.000	1.000	25,253.661	263.924	18,364,154.4...
PSV-2121A	0.000	Model Default	350.700	1.000	30,062.392	272.098	271,333.203
PSV-2131A	0.000	Model Default	208.300	1.000	20,787.682	255.286	685,415.518
BDV-2134A	0.000	Model Default	60.000	1.000	12,877.630	235.780	408,750.490
PSV-2122A/2123A	0.000	Model Default	204.000	1.000	20,533.222	254.755	7,254,292.158
BDV-2134 C	0.000	Model Default	60.000	1.000	12,877.630	235.780	408,750.490
PSV-2141/2142	0.000	Model Default	139.000	1.000	16,871.231	246.514	11,869,107.207
BDV-2141	0.000	Model Default	60.000	1.000	12,877.630	235.780	904,250.185
PSV-2131B	0.000	Model Default	208.300	1.000	20,787.682	255.286	685,415.518
PSV-2132B/2133B	0.000	Model Default	233.000	1.000	22,278.743	258.306	7,870,976.809
BDV-2151	0.000	Model Default	60.000	1.000	12,877.630	235.780	1,699,276.189
BDV-2134 B	0.000	Model Default	60.000	1.000	12,877.630	235.780	408,750.490
PSV-2121C	0.000	Model Default	350.700	1.000	30,062.392	272.098	271,333.203
BDV-2132 C	0.000	Model Default	60.000	1.000	12,877.630	235.780	700,400.056
PSV-2271	0.000	Model Default	216.000	1.000	21,247.137	256.233	438,226.605
BDV-2132 A	0.000	Model Default	60.000	1.000	12,877.630	235.780	700,400.056
BDV-2132 B	0.000	Model Default	60.000	1.000	12,877.630	235.780	700,400.056
PSV-2122C/2123C	0.000	Model Default	204.000	1.000	20,533.222	254.755	7,254,292.158
PSV-2122B/2123B	0.000	Model Default	204.000	1.000	20,533.222	254.755	7,254,292.158
PSV-2132C/2133C	0.000	Model Default	233.000	1.000	22,278.743	258.306	7,870,976.809
PSV-2132A/2133A	0.000	Model Default	233.000	1.000	22,278.743	258.306	7,870,976.809
XV-2110	0.000	Model Default	36.920	1.000	11,801.605	232.434	948,521.561
PSV-2121B	0.000	Model Default	350.700	1.000	30,062.392	272.098	271,333.203
PSV-2131C	0.000	Model Default	208.300	1.000	20,787.682	255.286	685,415.518
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2111/2112	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2113/2114	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2131A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2134A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2122A/2123A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2134 C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2141/2142	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2141	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2131B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2132B/2133B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2151	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2134 B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2132 C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2271	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2132 A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2132 B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2122C/2123C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2122B/2123B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2132C/2133C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2132A/2133A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
XV-2110	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2131C	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2111/2112	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2113/2114	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2131A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2134A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2122A/2123A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2134 C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2141/2142	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2141	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2131B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2132B/2133B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2151	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2134 B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2132 C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2271	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2132 A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2132 B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2122C/2123C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2122B/2123B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2132C/2133C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2132A/2133A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
XV-2110	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2131C	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2152

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2111/2112	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2113/2114	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2131A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2134A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2122A/2123A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2134 C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2141/2142	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2141	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2131B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2132B/2133B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2151	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2134 B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2132 C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2271	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2132 A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2132 B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2122C/2123C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2122B/2123B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2132C/2133C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2132A/2133A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
XV-2110	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2131C	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKED OUTLET

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	No	9.900	280
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKED OUTLET

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	3.600	278.857	17,833.000	20,229.871	3,408.297		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		256.959		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		81.901		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
BDV-2151	29.487	43.950	5,594.000		82.139		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	29.487	43.954	5,594.000		256.959		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	3.987	25.000	0.000				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKEDOUTLET

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKEDOUTLET

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKEDOUTLET

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	280.000	1.000	25,253.661	263.924	18,364,041.1...
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135B	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135C	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKED OUTLET

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKEDOUTLET

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113 BLOCKEDOUTLET

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	8.785	280
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	No	68.200	139
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	1,784.387		1
PSV-2113/2114	3.595	278.780	17,833.000	20,131.869	3,127.457		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	6.200	115.520	17,252.500	22,049.725	323.732		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
BDV-2151	29.487	43.950	5,594.000		101.146		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	3.987	25.000	0.000				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	280.000	1.000	25,995.302	269.733	18,905,959.1...
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	139.000	1.000	16,889.547	246.411	11,863,502.114
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135B	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135C	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	24.520		0.000000	0.000000	0.000000	0.395658
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Mole Fractions	24.562		0.004486	0.031791	0.054427	0.642692
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.604342	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.138327	0.077770	0.008444	0.018703	0.007009	0.003796	0.006588
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2141/2142 BLOCKED OUTLET

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.001968	0.000599	0.000299	0.000100	0.003001	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	No	9.900	238
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	8.785	280
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	67.085	139
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	3.600	236.647	11,270.000	35,890.682	1,864.944		1
PSV-2113/2114	3.595	278.780	17,833.000	20,131.869	3,127.457		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	140.010	17,252.498	22,193.233	344.535		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
BDV-2151	29.487	43.950	5,594.000		101.146		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	3.987	25.000	0.000				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	238.000	1.000	21,800.492	257.337	10,467,406.2...
PSV-2113/2114	0.000	Model Default	280.000	1.000	25,995.302	269.733	18,905,959.1...
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	139.000	1.000	17,042.009	251.149	11,990,912.293
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135B	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135C	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Mole Fractions	23.472		0.007000	0.030000	0.068000	0.673000
PSV-2113/2114	Molecular Weight	24.520		0.000000	0.000000	0.000000	0.395658
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	24.520		0.000000	0.000000	0.000000	0.395658
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.119000	0.063000	0.006000	0.013000	0.007000	0.003000	0.006000
PSV-2113/2114	0.604342	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.604342	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2111/2112 BLOCKED OUTLET

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.001000	0.000000	0.000000	0.000000	0.004000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	21.987	21
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	61.987	21
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	61.987	21
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	No	9.000	36.78
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	61.987	21
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	21.987	21
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	61.987	21
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	21
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	21.987	21
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.487	12.050	796.400		36.851		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.487	-4.170	1,825.000		27.608		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.487	-4.170	1,414.200		21.376		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	30.740	144.100		14.628		
BDV-2151	30.487	-4.170	3,430.000		51.851		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	10.487	12.050	796.400		36.046		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	30.487	-4.170	1,414.200		20.131		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	10.487	15.550	796.400				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	10.487	21.400	1,414.200				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	21.000	1.000	10,620.848	231.568	899,028.205
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	36.780	1.000	11,795.198	232.413	69,308.856
BDV-2151	0.000	Model Default	21.000	1.000	10,620.848	231.568	1,689,680.407
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	21.000	1.000	11,493.771	228.759	290,570.256
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	21.000	1.000	9,764.227	211.628	766,499.775
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2151	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2151	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-fire case

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2151	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	21.987	21
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	61.987	21
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	61.987	21
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	No	9.000	19
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	61.987	21
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	21.987	21
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	61.987	21
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	21
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	21.987	21
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.487	12.050	796.400		36.582		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.487	-4.170	1,825.000		26.720		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.487	-4.170	1,414.200		20.705		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	14.330	140.296		15.307		
BDV-2151	30.487	-4.170	3,430.000		50.364		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	10.487	12.050	796.400		36.582		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	30.487	-4.170	1,414.200		20.705		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	10.487	15.550	796.400				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	10.487	21.400	1,414.200				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	21.000	1.000	10,620.848	231.568	899,028.205
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	19.000	1.000	10,469.993	228.721	68,137.942
BDV-2151	0.000	Model Default	21.000	1.000	10,620.848	231.568	1,689,680.407
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	21.000	1.000	11,493.771	228.759	290,570.256
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	21.000	1.000	9,764.227	211.628	766,499.775
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
BDV-2151	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
BDV-2151	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110-COLD SHUT DOWN

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
BDV-2151	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	21.987	21
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	61.987	21
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	61.987	21
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	No	9.000	19
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	61.987	21
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	21.987	21
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	61.987	21
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	21
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	21.987	21
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	841.525		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	281.951		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.487	12.050	796.400		42.599		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.487	-4.170	1,825.000		32.935		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.487	-4.170	1,414.200		25.521		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	14.332	84.560		9.226		
BDV-2151	30.487	-4.170	3,430.000		62.019		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	10.487	12.050	796.400		42.599		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	30.487	-4.170	1,414.200		25.521		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	10.487	15.550	796.400				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	10.487	21.400	1,414.200				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	21.000	1.000	10,620.848	231.568	899,028.205
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	19.000	1.000	10,469.993	228.721	41,068.547
BDV-2151	0.000	Model Default	21.000	1.000	10,620.848	231.568	1,689,680.407
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	21.000	1.000	11,493.771	228.759	290,570.256
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	21.000	1.000	9,764.227	211.628	766,499.775
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Mole Fractions	21.558		0.003638	0.025202	0.047056	0.739809
BDV-2151	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.114249	0.047371	0.003942	0.008130	0.003066	0.001450	0.002224
BDV-2151	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : XV-2110 Spurious blowdown

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000542	0.000149	0.000071	0.000000	0.003101	0.000000	0.000000
BDV-2151	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	No	9.664	280
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	3.009	335.9

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	15,409.663	841.525		1
PSV-2113/2114	3.600	278.680	17,833.113	25,378.736	3,127.477		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	16,140.676	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
PSV-2132A/2133A	6.199	89.620	8,664.000	17,625.583	210.028		1
XV-2110	3.987	25.000	0.000		0.000		
BDV-2151	29.487	43.950	5,594.000		101.146		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	3.987	25.000	0.000				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	0.249	334.050	2,098.015	0.000	122.243		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	19,410.594	252.544	8,880,847.189
PSV-2113/2114	0.000	Model Default	280.000	1.000	25,253.661	263.924	18,364,157.5...
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	19,480.292	250.982	5,158,229.115
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default	335.900	1.000	136,474.248	555.450	1,994,444.254

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Mole Fractions	23.568		0.007433	0.030078	0.067700	0.672531
PSV-2113/2114	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	32.720		0.000000	0.000000	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Mole Fractions	143.561		0.050000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.118624	0.062637	0.006155	0.013004	0.006651	0.003177	0.005757
PSV-2113/2114	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.811073	0.188927	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2113/2114 BLOKED OUTLET

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.001489	0.000496	0.000298	0.000099	0.003871	0.000000	0.000000
PSV-2113/2114	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.950000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	59.987	60
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	59.987	60
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	8.987	25
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	25
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	59.987	60
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	59.987	60
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	8.987	25
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	59.987	60
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	8.987	25
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	No	54.100	60
PCV-2135B	AC-2102B	Pipe154	Control Valve	No	54.100	60
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	Yes	8.987	25

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	1,784.387		1
PSV-2113/2114	0.899	216.460	1,697.950	1,337.978	297.777		1
PSV-2121A	0.899	232.050	533.350	813.596	88.588		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	29.487	43.954	5,594.000		299.219		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	29.487	43.950	5,594.000		100.952		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	3.987	25.000	0.000		0.000		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	25.000	0.000		0.000		
BDV-2151	29.487	43.950	5,594.000		101.146		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	29.487	43.954	5,594.000		299.219		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	3.987	25.000	0.000		0.000		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	29.487	43.954	5,594.000				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	3.987	25.000	0.000				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	26.543	44.324	8,663.671		153.212		
PCV-2135B	26.543	44.324	8,663.671		153.212		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	3.987	25.000	0.000	0.000	0.000		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2151	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	60.000	1.000	13,387.583	234.801	2,377,289.072
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default	60.000	1.000	12,877.630	235.780	4,549,434.437
PCV-2135B	NaN	Model Default	60.000	1.000	12,877.630	235.780	4,549,434.437
PCV-2135C	NaN	Model Default	25.000	1.000	9,898.491	212.082	0.000
PSV-2293	NaN	Model Default		0.000			

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2151	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PCV-2135B	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PCV-2135B	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PCV-2135 A/B

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2151	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PCV-2135B	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Location	Outlet Pipe	Type	Ignored	Inlet Pressure (bar_g)	Inlet Temp. Spec. (C)
PV-2152	STATION OUTLET	Pipe5	Control Valve	Yes	51.687	60
PSV-2111/2112	V-2104	Pipe2	Relief Valve	Yes	9.664	195
PSV-2113/2114	V-2105	Pipe9	Relief Valve	Yes	9.664	219
PSV-2121A	V-2101A	Pipe10	Relief Valve	Yes	9.664	234.5
PSV-2131A	V-2102A	Pipe11	Relief Valve	Yes	25.394	123.89
BDV-2134A	V-2102 A OUTLET	Pipe15	Control Valve	Yes	21.987	21
PSV-2122A/2123A	C-2101A	Pipe16	Relief Valve	Yes	23.085	132
PSV-2141/2142	V-2103	Pipe41	Relief Valve	Yes	8.987	25
BDV-2141	V-2103	Pipe35	Control Valve	Yes	61.987	21
PSV-2271	V-2205	Pipe49	Relief Valve	Yes	9.664	251
BDV-2132 A	AC-2122 OUTLET	Pipe53	Control Valve	Yes	61.987	21
PSV-2132A/2133A	C-2102A	Pipe76	Relief Valve	Yes	67.085	132
XV-2110	V-2105	Pipe78	Control Valve	Yes	8.987	36.9
BDV-2151	PK-2101	Pipe113	Control Valve	Yes	61.987	21
PSV-2121B	V-2101B	Pipe115	Relief Valve	Yes	9.664	234.5
PSV-2131B	V-2102B	Pipe116	Relief Valve	Yes	25.394	123.89
BDV-2134 B	V-2102 B OUTLET	Pipe119	Control Valve	Yes	21.987	21
PSV-2122B/2123B	C-2101B	Pipe120	Relief Valve	Yes	24.185	132
BDV-2132 B	AC-2122 OUTLET	Pipe124	Control Valve	Yes	61.987	21
PSV-2132B/2133B	C-2102B	Pipe125	Relief Valve	Yes	68.185	132
PSV-2121C	V-2101C	Pipe139	Relief Valve	Yes	9.664	234.5
PSV-2131C	V-2102C	Pipe140	Relief Valve	Yes	25.394	123.89
BDV-2134 C	V-2102 C OUTLET	Pipe143	Control Valve	Yes	21.987	21
PSV-2122C/2123C	C-2101C	Pipe144	Relief Valve	Yes	24.185	132
BDV-2132 C	AC-2122 OUTLET	Pipe147	Control Valve	Yes	21.987	21
PSV-2132C/2133C	C-2102C	Pipe148	Relief Valve	Yes	68.185	132
PCV-2135A	AC-2102A	Pipe151	Control Valve	Yes	8.987	25
PCV-2135B	AC-2102B	Pipe154	Control Valve	Yes	8.987	25
PCV-2135C	AC-2102C	Pipe155	Control Valve	Yes	8.987	25
PSV-2293	V-2107	Pipe157	Relief Valve	No	4.235	335.9

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Allowable Backpressure (bar_g)	Outlet Temperature (C)	Mass Flow (kg/hr)	Rated Mass Flow (kg/hr)	Volumetric Flow (m3/hr)	Outlet Flange Diameter (mm)	Valves
PV-2152	25.337	44.058	17,605.044		318.482		
PSV-2111/2112	0.899	192.110	10,783.190	12,164.764	1,987.889		1
PSV-2113/2114	0.899	216.460	1,697.950	2,124.364	324.517		1
PSV-2121A	0.899	232.050	533.350	813.596	99.406		1
PSV-2131A	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134A	10.487	12.050	796.400		36.582		
PSV-2122A/2123A	2.199	122.334	8,881.000	12,993.892	563.002		1
PSV-2141/2142	3.987	25.000	0.000	0.000	0.000		1
BDV-2141	30.487	-4.170	1,825.000		26.720		
PSV-2271	0.899	248.740	204.200	448.578	33.917		1
BDV-2132 A	30.487	-4.170	1,414.200		20.705		
PSV-2132A/2133A	2.199	122.334	8,881.000	12,993.892	215.289		1
XV-2110	3.987	30.860	142.471		15.544		
BDV-2151	30.487	-4.170	3,430.000		50.364		
PSV-2121B	0.899	232.050	533.350	813.596	88.588		1
PSV-2131B	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 B	10.487	12.050	796.400		36.582		
PSV-2122B/2123B	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 B	30.487	-4.170	1,414.200		20.705		
PSV-2132B/2133B	2.199	122.334	8,881.000	12,993.892			1
PSV-2121C	0.899	232.050	533.350	813.596	88.588		1
PSV-2131C	2.199	119.210	1,401.500	2,200.620	81.617		1
BDV-2134 C	10.487	15.550	796.400				
PSV-2122C/2123C	2.199	122.334	8,881.000	12,993.892			1
BDV-2132 C	10.487	21.400	1,414.200				
PSV-2132C/2133C	2.199	122.334	8,881.000	12,993.892			1
PCV-2135A	3.987	25.000	0.000		0.000		
PCV-2135B	3.987	25.000	0.000		0.000		
PCV-2135C	3.987	25.000	0.000				
PSV-2293	0.350	296.570	2,098.015	2,089.963	122.243		1

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Relief Valve Type	Orifice Area (mm2)	Orifice	Back Pres. Limit (bar_g)	Outlet Fittings Loss Method	Inlet Length (m)	Inlet Elev. Change (m)
PV-2152					Calculated	2.000	1.000
PSV-2111/2112	Balanced	7,129.032	api_Q		Calculated	0.000	0.000
PSV-2113/2114	Balanced	4,116.129	api_P		Calculated	0.000	0.000
PSV-2121A	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131A	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134A					Calculated	0.000	0.000
PSV-2122A/2123A	Conventional	830.323	api_J		Calculated	0.000	0.000
PSV-2141/2142	Conventional	506.452	api_H		Calculated	0.000	0.000
BDV-2141					Calculated	0.000	0.000
PSV-2271	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2132 A					Calculated	0.000	0.000
PSV-2132A/2133A	Conventional	324.516	api_G		Calculated	0.000	0.000
XV-2110					Calculated	0.000	0.000
BDV-2151					Calculated	0.000	0.000
PSV-2121B	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131B	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 B					Calculated	0.000	0.000
PSV-2122B/2123B	Conventional	830.323	api_J		Calculated	0.000	0.000
BDV-2132 B					Calculated	0.000	0.000
PSV-2132B/2133B	Conventional	324.516	api_G		Calculated	0.000	0.000
PSV-2121C	Balanced	70.968	api_D		Calculated	0.000	0.000
PSV-2131C	Balanced	70.968	api_D		Calculated	0.000	0.000
BDV-2134 C					Calculated	0.000	0.000
PSV-2122C/2123C	Balanced	830.323	api_J		Calculated	0.000	0.000
BDV-2132 C					Calculated	0.000	0.000
PSV-2132C/2133C	Balanced	324.516	api_G		Calculated	0.000	0.000
PCV-2135A					Calculated	20.000	0.000
PCV-2135B					Calculated	0.000	0.000
PCV-2135C					Calculated	0.000	0.000
PSV-2293	Conventional	324.516	api_G		Calculated	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Inlet Material	Inlet Roughness (mm)	Inlet Nom. Diameter	Inlet Schedule	Inlet Intern. Diameter (mm)	Inlet Pipe Class	Inlet Fittings Loss A	Inlet Fittings Loss B
PV-2152	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PSV-2111/2112	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2113/2114	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122A/2123A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2141/2142	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2141	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2271	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132A/2133A	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
XV-2110	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2151	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122B/2123B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132B/2133B	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2121C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2131C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2134 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2122C/2123C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
BDV-2132 C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2132C/2133C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PCV-2135A	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135B	Carbon Steel	0.046	4 inch	40	102.260	No	0.000	0.000
PCV-2135C	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000
PSV-2293	Carbon Steel	0.046	12 inch	40	303.225	No	0.000	0.000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Static Inlet Pres. Drop (bar)	VLE Method	Inlet Temp. Calc. (C)	Vapour Fraction	Enthalpy (kJ/hr)	Entropy (kJ/kgmole/K)	Energy (kJ/hr)
PV-2152	0.017	Model Default	60.000	1.000	13,003.106	234.496	7,496,707.673
PSV-2111/2112	0.000	Model Default	195.000	1.000	16,286.727	234.160	5,494,362.761
PSV-2113/2114	0.000	Model Default	219.000	1.000	17,324.256	236.127	872,230.014
PSV-2121A	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131A	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134A	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122A/2123A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2141/2142	0.000	Model Default	25.000	1.000	9,898.491	212.082	0.000
BDV-2141	0.000	Model Default	21.000	1.000	10,620.848	231.568	899,028.205
PSV-2271	0.000	Model Default	251.000	1.000	18,629.172	238.696	112,797.850
BDV-2132 A	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132A/2133A	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
XV-2110	0.000	Model Default	36.900	1.000	11,800.690	232.431	68,557.101
BDV-2151	0.000	Model Default	21.000	1.000	10,620.848	231.568	1,689,680.407
PSV-2121B	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131B	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	392,321.130
PSV-2122B/2123B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 B	0.000	Model Default	21.000	1.000	10,620.848	231.568	696,660.650
PSV-2132B/2133B	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PSV-2121C	0.000	Model Default	234.500	1.000	17,953.785	237.387	283,935.601
PSV-2131C	0.000	Model Default	123.890	1.000	13,568.149	227.654	563,852.146
BDV-2134 C	0.000	Model Default	21.000	1.000	11,493.771	228.759	290,570.256
PSV-2122C/2123C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
BDV-2132 C	0.000	Model Default	21.000	1.000	9,764.227	211.628	766,499.775
PSV-2132C/2133C	0.000	Model Default	132.000	1.000	13,881.158	228.434	3,655,435.321
PCV-2135A	NaN	Model Default		0.000			
PCV-2135B	NaN	Model Default		0.000			
PCV-2135C	NaN	Model Default		0.000			
PSV-2293	NaN	Model Default	335.900	1.000	136,474.248	555.450	1,994,444.254

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Composition Basis	Mol. Wt.	SPL (dB)	H2O	CO2	H2S	Methane
PV-2152	Mole Fractions	30.536		0.646002	0.139029	0.078131	0.008455
PSV-2111/2112	Molecular Weight	31.964		0.463385	0.536615	0.000000	0.000000
PSV-2113/2114	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122A/2123A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2141/2142	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
BDV-2141	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2271	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 A	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132A/2133A	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
XV-2110	Mole Fractions	24.523		0.010314	0.031606	0.054119	0.638921
BDV-2151	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2121B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2122B/2123B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 B	Molecular Weight	21.560		0.000000	0.000000	0.000000	0.606680
PSV-2132B/2133B	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2121C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PSV-2131C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2134 C	Mole Fractions	31.502		0.638051	0.137328	0.077209	0.008383
PSV-2122C/2123C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
BDV-2132 C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	Molecular Weight	33.725		0.395658	0.604342	0.000000	0.000000
PCV-2135A	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135B	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PCV-2135C	Molecular Weight	18.015		1.000000	0.000000	0.000000	0.000000
PSV-2293	Mole Fractions	143.561		0.050000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	Ethane	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	n-Hexane
PV-2152	0.018786	0.007000	0.003809	0.006623	0.001978	0.000603	0.000300
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.137515	0.077314	0.008394	0.018594	0.006968	0.003774	0.006549
BDV-2151	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.393320	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.018568	0.006959	0.003769	0.006540	0.001954	0.001954	0.000297
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Aspen Flare System Analyzer



Version 37.0.0.395

User Name : Undefined
 Job Code :
 Project : BINAK
 Description :
 Scenario : PSV-2293 FIRE

Source Data

Name	n-Heptane	n-Octane	n-Nonane	n-Decane	Nitrogen	TEGlycol	n-C11
PV-2152	0.000100	0.000241	0.054025	0.003017	0.031901	0.000000	0.000000
PSV-2111/2112	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2113/2114	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122A/2123A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2141/2142	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2141	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2271	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132A/2133A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
XV-2110	0.001956	0.000596	0.000297	0.000099	0.002984	0.000000	0.000000
BDV-2151	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2122B/2123B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132B/2133B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2121C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2131C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2134 C	0.000099	0.010300	0.054046	0.002980	0.031563	0.000000	0.000000
PSV-2122C/2123C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
BDV-2132 C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2132C/2133C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135A	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135B	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PCV-2135C	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PSV-2293	0.000000	0.000000	0.000000	0.000000	0.000000	0.950000	0.000000