



Origins in 1898

Thermodynamic Properties of Saturated Propane

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DRAWINGS ARE 'TYPICAL ONLY' AND NOT INTENDED FOR ENGINEERING PURPOSES

Enthalpies and Entropies are referred to saturated liquid at -200°F. where the values are zero. Refer to Fig. 1 for Enthalpies and Entropies of super heated propane vapor.

Temp. Deg. F. <i>t</i>	Pressure Lb. Per Sq. In.		Specific Volume Cu. Ft. per Lb.		Density Lb. Per Cu. Ft.		Enthalpy** Btu per Lb.		Latent** Heat Btu per Lb. <i>L</i>	Entropy** Btu per Lb. Deg. F.		Temp. Deg. F. <i>t</i>
	Absolute <i>P</i>	Gauge <i>γ.p.</i>	Liquid <i>v</i>	Vapor <i>V</i>	Liquid <i>l/v</i>	Vapor <i>l/V</i>	Liquid <i>hf</i>	Vapor <i>hγ</i>		Liquid <i>sf</i>	Vapor <i>sγ</i>	
-75	6.37	*17.0	0.02660	14.5	37.59	0.0690	65.5	255.5	190.0	0.142	0.625	-75
-70	7.37	*14.9	0.02674	12.9	37.40	0.0775	68.0	257.0	189.0	0.148	0.623	-70
-65	8.48	*12.7	0.02688	11.3	37.20	0.0885	71.5	258.0	186.5	0.154	0.621	-65
-60	9.72	*10.1	0.02703	9.93	37.00	0.111	74.0	259.5	184.0	0.160	0.620	-60
-55	11.1	*7.3	0.02717	8.70	36.80	0.115	77.0	261.0	183.2	0.167	0.618	-55
-50	12.6	*4.3	0.02732	7.74	36.60	0.129	79.5	262.7	181.9	0.173	0.617	-50
-45	14.4	*0.6	0.02748	6.89	36.39	0.145	82.3	2644	181.9	0.179	0.615	-45
-40	16.2	1.5	0.02763	3.13	36.19	0.163	85.0	265.8	180.8	0.185	0.614	-40
-35	18.1	3.4	0.02779	5.51	35.99	0.181	87.5	264.2	179.7	0.190	0.613	-35
-30	20.3	5.6	0.02795	4.93	35.78	0.203	90.2	268.9	178.7	0.196	0.612	-30
-25	22.7	8.0	0.02811	4.46	35.58	0.224	92.8	270.3	177.5	0.202	0.610	-25
-20	25.4	10.7	0.02827	4.00	35.37	0.250	95.6	271.8	176.2	0.208	0.608	-20
-15	28.3	13.6	0.02844	3.60	35.16	0.278	98.3	273.2	174.9	0.214	0.607	-15
-10	31.4	16.7	0.02860	3.26	34.96	0.307	101.0	274.9	173.9	0.220	0.607	-10
-5	34.7	20.0	0.02878	2.97	34.75	0.337	103.8	276.2	172.4	0.226	0.606	-5
0	38.2	23.5	0.02895	2.71	34.54	0.369	106.2	277.7	171.5	0.231	0.605	0
+ 5	41.9	27.2	0.02913	2.48	34.33	0.403	108.8	279.0	170.2	0.236	0.604	+ 5
10	46.0	31.3	0.02931	2.27	34.12	0.441	111.3	280.5	167.2	0.246	0.603	10
15	50.6	35.9	0.02950	2.07	33.90	0.483	114.0	281.8	167.8	0.248	0.602	15
20	55.5	40.8	0.02970	1.90	33.67	0.526	116.8	283.1	166.3	0.254	0.601	20
25	60.9	46.2	0.02991	1.74	33.43	0.575	119.7	284.4	164.7	0.2690	0.600	25
30	66.3	51.6	0.03012	1.60	33.20	0.625	122.3	285.7	163.4	0.266	0.599	30
35	72.0	57.3	0.03033	1.48	32.94	0.676	125.0	287.0	162.0	0.272	0.598	35
40	78.0	63.3	0.03055	1.37	32.73	0.730	128.0	288.3	160.3	0.278	0.597	40
45	84.6	69.9	0.03078	1.27	32.49	0.787	131.1	289.5	158.4	0.285	0.596	45
50	91.8	77.1	0.03102	1.18	32.24	0.847	134.2	290.7	156.5	0.292	0.596	50
55	99.3	84.6	0.03125	1.10	32.00	0.909	137.2	292.0	154.8	0.298	0.596	55
60	107.1	92.4	0.03150	1.01	31.75	0.990	140.6	293.2	152.6	0.306	0.595	60
65	115.4	100.7	0.03174	0.945	31.50	1.06	143.8	294.5	150.7	0.313	0.594	65
70	124.0	109.3	0.03201	0.883	31.24	1.13	147.5	295.8	148.3	0.321	0.594	70
75	133.2	118.5	0.03229	0.825	30.97	1.21	150.3	296.9	146.6	0.327	0.594	75
80	142.8	128.1	0.03257	0.770	30.70	1.30	154.0	299.1	145.1	0.335	0.593	80
85	153.1	138.4	0.03284	0.722	30.42	1.39	157.0	299.2	142.2	0.342	0.593	85
90	164.0	149.0	0.03317	0.673	30.15	1.49	160.3	300.3	140.0	0.349	0.593	90
95	175.0	160.0	0.03348	0.632	29.84	1.58	163.4	301.3	137.9	0.356	0.592	95
100	187.0	172.0	0.03381	0.591	29.58	1.69	166.8	302.4	135.6	0.363	0.592	100
105	200.0	185.0	0.03416	0.553	29.27	1.81	169.8	303.2	133.4	0.370	0.592	105
110	212.0	197.0	0.03453	0.520	28.96	1.92	172.8	304.0	131.2	0.376	0.591	110
115	226.0	211.0	0.03493	0.488	28.63	2.05	176.2	304.7	128.5	0.383	0.590	115
120	240.0	225.0	0.03534	0.459	28.30	2.18	179.2	305.2	125.4	0.391	0.589	120
125	254.0	239.0	0.03575	0.432	27.97	2.31	183.5	305.8	122.3	0.399	0.588	125
130	272.0	257.3	0.03618	0.404	27.64	2.48	183.8	306.1	119.3	0.406	0.587	130
135	288.0	273.3	0.03662	0.382	27.32	2.62	190.0	306.3	116.3	0.413	0.583	135
140	305.0	290.3	0.03707	0.360	27.00	2.78	194.0	306.5	112.5	0.422	0.505	140

† Based on material from Dana, Jenkins, Burdick and Timm, published originally in REFRIGERATING ENGINEERING, June, 1926, Vol. 12, No. 12, Page 403.

* Inches of mercury below one standard atmosphere (29.92 in.).

** From Mollier Diagrams for Propane, W.C. Edmister, Standard Oil Co. (Indiana).

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