Section 3 – Appendix

Steam Tables

Properties of saturated steam – from 0.08865 to 15,500 lb/sq.in. absolute pressure

Table 1: Saturated Steam: Temperature Table

Temp Fahr t	Abs Press. Lb per Sq In p	Specific Volume Sat. Liquid v_f	Evap vf_g	Sat. Vapor v_g	Enthalpy Sat. Liquid h_f	Evap. hf_g	Sat. Vapor h_g	Entropy Sat. Liquid sf	Evap. sfg	Sat. Vapor s_g	Temp. Fahr. t
32.0*	0.08859	0.016022	3304.7	3304.7	-0.0179	1075.5	1075.5	0.0000	2.1873	2.1873	32.0*
34.0	0.09600	0.016021	3061.9	3061.9	1.996	1074.4	1076.4	0.0041	2.1762	2.1802	34.0
36.0	0.01395	0.016020	2839.0	2839.0	4.008	1073.2	1077.2	0.0081	2.1651	2.1732	36.0
38.0	0.11249	0.016019	2634.1	2634.2	6.018	1072.1	1078.1	0.0122	2.1541	2.1663	38.0
40.0	0.12163	0.016019	2445.8	2445.8	8.027	1071.0	1079.0	0.0162	2.1432	2.1594	40.0
42.0	0.13143	0.016019	2272.4	2272.4	10.035	1069.8	1079.9	0.0202	2.1325	2.1527	42.0
44.0	0.14192	0.016019	2112.8	2112.8	12.041	1068.7	1080.7	0.0242	2.1217	2.1459	44.0
46.0	0.15314	0.016020	1965.7	1965.7	14.047	1067.6	1081.6	0.0282	2.1111	2.1393	46.0
48.0	0.16514	0.016021	1830.0	1830.0	16.051	1066.4	1082.5	0.0321	2.1006	2.1327	48.0
50.0	0.17796	0.016023	1704.8	1704.8	18.054	1065.3	1083.4	0.0361	2.0901	2.1262	50.0
52.0	0.19165	0.016024	1589.2	1589.2	20.057	1064.2	1084.2	0.0400	2.0798	2.1197	52.0
54.0	0.20625	0.016026	1482.4	1482.4	22.058	1063.1	1085.1	0.0439	2.0695	2.1134	54.0
56.0	0.22183	0.016028	1383.6	1383.6	24.059	1061.9	1086.0	0.0478	2.0593	2.1070	56.0
58.0	0.23843	0.016031	1292.2	1292.2	26.060	1060.8	1086.9	0.0516	2.0491	2.1008	58.0
60.0	0.25611	0.016033	1207.6	1207.6	28.060	1059.7	1087.7	0.0555	2.0391	2.0946	60.0
62.0	0.27494	0.016036	1129.2	1129.2	30.059	1058.5	1088.6	0.0593	2.0291	2.0885	62.0
64.0	0.29497	0.016039	1056.5	1056.5	32.058	1057.4	1089.5	0.0632	2.0192	2.0824	64.0
66.0	0.31626	0.016043	989.0	989.1	34.056	1056.3	1090.4	0.0670	2.0094	2.0764	66.0
68.0	0.33889	0.016046	926.5	926.5	36.054	1055.2	1091.2	0.0708	1.9996	2.0704	68.0
70.0	0.36292	0.01605	868.3	868.4	38.052	1054.0	1092.1	0.0745	1.99	2.0645	70.0
72.0	0.38844	0.016054	814.3	814.3	40.019	1052.9	1093.0	0.0783	1.9804	2.0587	72.0
74.0	0.4155	0.016058	764.1	764.1	42.046	1051.8	1093.8	0.0821	1.9708	2.0529	74.0
76.0	0.4442	0.016063	717.4	717.4	44.043	1050.7	1094.7	0.0858	1.9614	2.0472	76.0
78.0	0.47461	0.016067	673.8	673.9	46.04	1049.5	1095.6	0.0895	1.952	2.0415	78.0
80.0	0.50683	0.016072	633.3	633.3	48.037	1048.4	1096.4	0.0932	1.9426	2.0359	80.0
82.0	0.54093	0.016077	595.5	595.5	50.033	1047.3	1097.3	0.0969	1.9334	2.0303	82.0
84.0	0.57702	0.016082	560.3	560.3	52.029	1046.1	1098.2	0.1006	1.9242	2.0248	84.0
86.0	0.61518	0.016087	527.5	527.5	54.026	1045.0	1099.0	0.1043	1.9151	2.0193	86.0
88.0	0.65551	0.016093	496.8	496.8	56.022	1043.9	1099.9	0.1079	1.906	2.0139	88.0
90.0	0.69813	0.016099	468.1	468.1	58.018	1042.7	1100.8	0.1115	1.897	2.0086	90.0
92.0	0.74313	0.016105	441.3	441.3	60.014	1041.6	1101.6	0.1152	1.8881	2.0033	92.0
94.0	0.79062	0.016111	416.3	416.3	62.01	1040.5	1102.5	0.1188	1.8792	1.9980	94.0
96.0	0.84072	0.016117	392.8	392.9	64.006	1039.3	1103.3	0.1224	1.8704	1.9928	96.0
98.0	0.89356	0.016123	370.9	370.9	66.003	1038.2	1104.2	0.1260	1.8617	1.9876	98.0
100.0	0.94924	0.01613	350.4	350.4	67.999	1037.1	1105.1	0.1295	1.853	1.9825	100.0
102.0	1.00789	0.016137	331.1	331.1	69.995	1035.9	1105.9	0.1331	1.8444	1.9775	102.0
104.0	1.06965	0.016144	313.1	313.1	71.992	1034.8	1106.8	0.1366	1.8358	1.9725	104.0
106.0	1.1347	0.016151	296.16	296.18	73.99	1033.6	1107.6	0.1402	1.8273	1.9675	106.0
108.0	1.203	0.016158	280.28	280.30	75.98	1032.5	1108.5	0.1437	1.8188	1.9626	108.0
110.0	1.275	0.016165	265.37	265.39	77.98	1031.4	1109.3	0.1472	1.8105	1.9577	110.0
112.0	1.3505	0.016173	251.37	251.38	79.98	1030.2	1110.2	0.1507	1.8021	1.9528	112.0
114.0	1.4299	0.01618	238.21	238.22	81.97	1029.1	1111.0	0.1542	1.7938	1.9480	114.0
116.0	1.5133	0.016188	225.84	225.85	83.97	1027.9	1111.9	0.1577	1.7856	1.9433	116.0
118.0	1.6009	0.016196	214.20	214.21	85.97	1026.8	1112.7	0.1611	1.7774	1.9386	118.0
120.0	1.6927	0.016204	203.25	203.26	87.97	1025.6	1113.6	0.1646	1.7693	1.9339	120.0
122.0	1.7891	0.016213	192.94	192.95	89.96	1024.5	1114.4	0.1680	1.7613	1.9293	122.0
124.0	1.8901	0.016221	183.23	183.24	91.96	1023.3	1115.3	0.1715	1.7533	1.9247	124.0
126.0	1.9959	0.016229	174.08	174.09	93.96	1022.2	1116.1	0.1749	1.7453	1.9202	126.0
128.0	2.1068	0.016238	165.45	165.47	95.96	1021.0	1117.0	0.1783	1.7374	1.9157	128.0
130.0	2.223	0.016247	157.32	157.33	97.96	1019.8	1117.8	0.1817	1.7295	1.9112	130.0
132.0	2.3445	0.016256	149.64	149.66	99.95	1018.7	1118.6	0.1851	1.7217	1.9068	132.0
134.0	2.4717	0.016265	142.40	142.41	101.95	1017.5	1119.5	0.1884	1.7140	1.9024	134.0
136.0	2.6047	0.016274	135.55	135.57	103.95	1016.4	1120.3	0.1918	1.7063	1.8980	136.0
138.0	2.7438	0.016284	129.09	129.11	105.95	1015.2	1121.1	0.1951	1.6986	1.8937	138.0
140.0	2.8892	0.016293	122.98	123.00	107.95	1014.0	1122.0	0.1985	1.6910	1.8895	140.0
142.0	3.0411	0.016303	117.21	117.22	109.95	1012.9	1122.8	0.2018	1.6534	1.8852	142.0
144.0	3.1997	0.016312	111.74	111.76	111.95	1011.7	1123.6	0.2051	1.6759	1.8810	144.0
146.0	3.3653	0.016322	106.58	106.59	113.95	1010.5	1124.5	0.2084	1.6684	1.8769	146.0
148.0	3.5381	0.016332	101.68	101.70	115.95	1009.3	1125.3	0.2117	1.6610	1.8727	148.0
150.0	3.7184	0.016343	97.05	97.07	117.95	1008.2	1126.1	0.2150	1.6536	1.8686	150.0
152.0	3.9065	0.016353	92.66	92.68	119.95	1007.0	1126.9	0.2183	1.6463	1.8646	152.0
154.0	4.1025	0.016363	88.50	88.52	121.95	1005.8	1127.7	0.2216	1.6390	1.8606	154.0
156.0	4.3068	0.016374	84.56	84.57	123.95	1004.6	1128.6	0.2248	1.6318	1.8566	156.0
158.0	4.5197	0.016384	80.82	80.83	125.96	1003.4	1129.4	0.2281	1.6245	1.8526	158.0
160.0	4.7414	0.016395	77.27	77.29	127.96	1002.2	1130.2	0.2313	1.6174	1.8487	160.0
162.0	4.9722	0.016406	73.90	73.92	129.96	1001.0	1131.0	0.2345	1.6103	1.8448	162.0
164.0	5.2124	0.016417	70.70	70.72	131.96	999.8	1131.8	0.2377	1.6032	1.8409	164.0
166.0	5.4623	0.016428	67.67	67.68	133.97	998.6	1132.6	0.2409	1.5961	1.8371	166.0
168.0	5.7223	0.01644	64.78	64.80	135.97	997.4	1133.4	0.2441	1.5892	1.8333	168.0
170.0	5.9926	0.016451	62.04	62.06	137.7	996.2	1134.2	0.2473	1.5822	1.8295	170.0
172.0	6.2736	0.016463	59.43	59.45	139.98	995.0	1135.0	0.2505	1.5753	1.8258	172.0
174.0	6.5656	0.016474	56.95	56.97	141.98	993.8	1135.8	0.2537	1.5684	1.8221	174.0
176.0	6.869	0.01486	54.59	54.61	143.99	992.6	1136.6	0.2568	1.5616	1.8184	176.0
178.0	7.184	0.016498	52.35	52.36	145.99	991.4	1137.4	0.2600	1.5548	1.8147	178.0

*The states shown are meta stable

Table 1: Saturated Steam: Temperature Table — *continued*

Temp Fahr t	Abs Press. Lb per Sq In p	Specific Volume Sat. Liquid v_f	Evap vf_g	Sat. Vapor v_g	Enthalpy Sat. Liquid h_f	Evap. hf_g	Sat. Vapor h_g	Entropy Sat. Liquid sf	Evap. sfg	Sat. Vapor s_g	Temp. Fahr. t
180.0	7.51110	0.016510	50.21	50.22	148.00	990.2	1138.2	0.2631	1.5480	1.8110	180.0
182.0	7.850	0.016522	48.172	48.189	150.01	989.0	1139.0	0.2662	1.5413	1.8075	182.0
184.0	8.203	0.016534	46.232	46.249	152.01	987.8	1139.8	0.2694	1.5346	1.8040	184.0
186.0	8.568	0.016547	44.383	44.400	154.02	986.5	1140.5	0.2725	1.5279	1.8004	186.0
188.0	8.947	0.016559	42.621	42.638	156.03	985.3	1141.3	0.2756	1.5213	1.7969	188.0
190.0	9.340	0.016572	40.941	40.957	158.04	984.1	1142.1	0.2787	1.5148	1.7934	190.0
192.0	9.747	0.016585	39.337	39.354	160.05	982.8	1142.9	0.2818	1.5082	1.7900	192.0
194.0	10.168	0.016598	37.808	37.824	162.05	981.6	1143.7	0.2848	1.5017	1.7865	194.0
196.0	10.605	0.016611	36.348	36.364	164.06	980.4	1144.4	0.2879	1.4952	1.7831	196.0
198.0	11.058	0.016624	34.954	34.970	166.08	979.1	1145.2	0.2910	1.4888	1.7798	198.0
200.0	11.526	0.016637	33.622	33.639	168.09	977.9	1146.0	0.2940	1.4824	1.7764	200.0
204.0	12.512	0.016664	31.135	31.151	172.11	975.4	1147.5	0.3001	1.4697	1.7698	204.0
208.0	13.568	0.016691	28.862	28.878	176.14	972.8	1149.0	0.3061	1.4571	1.7632	208.0
212.0	14.696	0.016719	26.782	26.799	180.17	970.3	1150.5	0.3121	1.4447	1.7568	212.0
216.0	15.901	0.016747	24.878	24.894	184.20	967.8	1152.0	0.3181	1.4323	1.7505	216.0
220.0	17.186	0.016775	23.131	23.148	188.23	965.2	1153.4	0.3241	1.4201	1.7442	220.0
224.0	18.556	0.016805	21.529	21.545	192.27	962.6	1154.9	0.3300	1.4081	1.7380	224.0
228.0	20.015	0.016834	20.056	20.073	196.31	960.0	1156.3	0.3359	1.3961	1.7320	228.0
232.0	21.567	0.016864	18.701	18.718	200.35	957.4	1157.8	0.3417	1.3842	1.7260	232.0
236.0	23.216	0.016895	17.454	17.471	204.40	954.8	1159.2	0.3476	1.3725	1.7201	236.0
240.0	24.968	0.016926	16.304	16.321	208.45	952.1	1160.6	0.3533	1.3609	1.7142	240.0
244.0	26.826	0.016958	15.243	15.260	212.50	949.5	1162.0	0.3591	1.3494	1.7085	244.0
248.0	28.796	0.016990	14.264	14.281	216.56	946.8	1163.4	0.3649	1.3379	1.7028	248.0
252.0	30.883	0.017022	13.358	13.375	220.62	944.1	1164.7	0.3706	1.3266	1.6972	252.0
256.0	33.091	0.017055	12.520	12.538	224.69	941.4	1166.1	0.3763	1.3154	1.6917	256.0
260.0	35.427	0.017089	11.745	11.762	228.76	938.6	1167.4	0.3819	1.3043	1.6862	260.0
264.0	37.894	0.017123	11.025	11.042	232.83	935.9	1168.7	0.3876	1.2933	1.6808	264.0
268.0	40.500	0.017157	10.358	10.375	236.91	933.1	1170.0	0.3932	1.2823	1.6755	268.0
272.0	43.249	0.017193	9.738	9.755	240.99	930.3	1171.3	0.3987	1.2715	1.6702	272.0
276.0	46.147	0.017228	9.162	9.180	245.09	927.5	1172.5	0.4043	1.2607	1.6650	276.0
280.0	49.200	0.017264	8.627	8.644	249.17	924.6	1173.8	0.4098	1.2501	1.6599	280.0
284.0	52.414	0.01730	8.1280	8.1453	253.3	921.7	1175.0	0.4154	1.2395	1.6548	284.0
288.0	55.795	0.01734	7.6634	7.6807	257.4	918.8	1176.2	0.4208	1.2290	1.6498	288.0
292.0	59.350	0.01738	7.2301	7.2475	261.5	915.9	1177.4	0.4263	1.2186	1.6449	292.0
296.0	63.084	0.01741	6.8259	6.8433	265.6	913.0	1178.6	0.4317	1.2082	1.6400	296.0
300.0	67.005	0.01745	6.4483	6.4658	269.7	910.0	1179.7	0.4372	1.1979	1.6351	300.0
304.0	71.119	0.01749	6.0955	6.1130	273.8	907.0	1180.9	0.4426	1.1877	1.6303	304.0
308.0	75.433	0.01753	5.7655	5.7830	278.0	904.0	1182.0	0.4479	1.1776	1.6256	308.0
312.0	79.953	0.01757	5.4566	5.4742	282.1	901.0	1183.1	0.4533	1.1676	1.6209	312.0
316.0	84.688	0.01761	5.1673	5.1849	286.3	897.9	1184.1	0.4586	1.1576	1.6162	316.0
320.0	89.643	0.01766	4.8961	4.9138	290.4	894.8	1185.2	0.4640	1.1477	1.6116	320.0
324.0	94.826	0.01770	4.6418	4.6595	294.6	891.6	1186.2	0.4692	1.1378	1.6071	324.0
328.0	100.245	0.01774	4.4030	4.4208	298.7	888.5	1187.2	0.4745	1.1280	1.6025	328.0
332.0	105.907	0.01779	4.1788	4.1966	302.9	885.3	1188.2	0.4798	1.1183	1.5981	332.0
336.0	111.820	0.01783	3.9681	3.9859	307.1	882.1	1189.1	0.4850	1.1086	1.5936	336.0
340.0	117.992	0.01787	3.7699	3.7870	311.3	878.8	1190.1	0.4902	1.0990	1.5892	340.0
344.0	124.430	0.01792	3.5834	3.6013	315.5	875.5	1191.0	0.4954	1.0894	1.5849	344.0
348.0	131.142	0.01797	3.4078	3.4258	319.7	872.2	1191.1	0.5006	1.0799	1.5806	348.0
352.0	138.138	0.01801	3.2423	3.2603	323.9	868.9	1192.7	0.5058	1.0705	1.5763	352.0
356.0	145.424	0.01806	3.0863	3.1044	328.1	865.5	1193.6	0.5110	1.0611	1.5721	356.0
360.0	153.010	0.01811	2.9392	2.9573	332.3	862.1	1194.4	0.5161	1.0517	1.5678	360.0
364.0	160.903	0.01816	2.8002	2.8184	336.5	858.6	1195.2	0.5212	1.0424	1.5637	364.0
368.0	169.113	0.01821	2.6691	2.6873	340.8	855.1	1195.9	0.5263	1.0332	1.5595	368.0
372.0	177.648	0.01826	2.5451	2.5633	345.0	851.6	1196.7	0.5314	1.0240	1.5554	372.0
376.0	186.517	0.01831	2.4279	2.4462	349.3	848.1	1197.4	0.5365	1.0148	1.5513	376.0
380.0	195.729	0.01836	2.3170	2.3353	353.6	844.5	1198.0	0.5416	1.0057	1.5473	380.0
384.0	205.294	0.01842	2.2120	2.3040	357.9	840.8	1198.7	0.5466	0.9966	1.5432	384.0
388.0	215.220	0.01847	2.1126	2.1311	362.2	837.2	1199.3	0.5516	0.9876	1.5392	388.0
392.0	225.516	0.01853	2.0184	2.0369	366.5	833.4	1199.9	0.5567	0.9786	1.5352	392.0
396.0	236.193	0.01858	1.9291	1.9477	370.8	829.7	1200.4	0.5617	0.696	1.5313	396.0
400.0	247.259	0.01864	1.8444	1.8630	375.1	825.9	1201.0	0.5667	0.9607	1.5274	400.0
404.0	258.725	0.01870	1.7640	1.4827	379.4	822.0	1201.5	0.5717	0.9518	1.5234	404.0
408.0	270.600	0.01875	1.6877	1.7064	383.8	818.2	1201.9	0.5766	0.9429	1.5195	408.0
412.0	282.894	0.01881	1.6152	1.6340	388.1	814.2	1202.4	0.5816	0.9341	1.5157	412.0
416.0	295.617	0.01887	1.5463	1.5651	392.5	810.2	1202.8	0.5866	0.9253	1.5118	416.0
420.0	308.780	0.01894	1.4808	1.4997	396.9	806.2	1203.1	0.5915	0.9165	1.5080	420.0
424.0	322.391	0.01900	1.4184	1.4374	401.3	802.2	1203.5	0.5964	0.9077	1.5042	424.0
428.0	336.463	0.01906	1.3591	1.3782	405.7	798.0	1203.7	0.6014	0.8990	1.5004	428.0
432.0	351.00	0.01913	1.30266	1.32179	410.1	793.9	1204.0	0.6063	0.8903	1.4966	432.0
436.0	366.03	0.01919	1.24887	1.26806	414.6	789.7	1204.2	0.6112	0.8816	1.4928	436.0
440.0	381.54	0.01926	1.19761	1.21687	419.0	785.4	1204.4	0.6161	0.8729	1.4890	440.0
444.0	397.56	0.01933	1.14874	1.16806	423.5	781.1	1204.6	0.6210	0.8643	1.4853	444.0
448.0	414.09	0.01940	1.10212	1.12152	428.0	776.7	1204.7	0.6259	0.8557	1.4815	448.0
452.0	431.14	0.01947	1.05764	1.07711	432.5	772.3	1204.8	0.6308	0.8471	1.4778	452.0
456.0	448.73	0.01954	1.01518	1.03472	437.0	767.8	1204.8	0.6356	0.8385	1.4741	456.0

Table 1: Saturated Steam: Temperature Table — *continued*

Temp Fahr t	Abs Press. Lb per Sq In p	Specific Volume Sat. Liquid v_f	Evap vf_g	Sat. Vapor v_g	Enthalpy Sat. Liquid h_f	Evap. hf_g	Sat. Vapor h_g	Entropy Sat. Liquid sf	Evap. sfg	Sat. Vapor s_g	Temp. Fahr. t
460.0	466.87	0.01961	0.97463	0.99424	441.5	763.2	1204.8	0.6405	0.8299	1.4704	460.0
464.0	485.56	0.01969	0.93588	0.95557	446.1	758.6	1204.7	0.6454	0.8213	1.4667	464.0
468.0	504.83	0.01976	0.89885	0.91862	450.7	754.0	1204.6	0.6502	0.8127	1.4629	468.0
472.0	524.67	0.01984	0.86345	0.88329	455.2	749.3	1204.5	0.6551	0.8042	1.4592	472.0
476.0	545.11	0.01992	0.82958	0.84950	459.9	744.5	1204.3	0.6599	0.7956	1.4555	476.0
480.0	566.15	0.02000	0.79716	0.81717	464.5	739.6	1204.1	0.6648	0.7871	1.4518	480.0
484.0	587.81	0.02009	0.76613	0.78622	469.1	734.7	1203.8	0.6696	0.7785	1.4481	484.0
488.0	610.1	0.02017	0.73641	0.75658	473.8	729.7	1203.5	0.6745	0.7700	1.4444	488.0
492.0	6633.03	0.02026	0.70794	0.72820	478.5	724.6	1203.1	0.6793	0.7614	1.4407	492.0
496.0	656.61	0.02034	0.68065	0.70100	483..2	719.5	1202.7	0.6842	0.7528	1.4370	496.0
500.0	680.86	0.02043	0.65448	0.67492	487.9	714.3	1202.2	0.6890	0.7443	1.4333	500.0
504.0	705.78	0.02053	0.62938	0.64991	492.7	709.0	1201.7	0.6939	0.7357	1.4296	504.0
508.0	731.40	0.02062	0.60530	0.62592	497.5	703.7	1201.1	0.6987	0.7271	1.4258	508.0
512.0	757.72	0.02072	0.58218	0.60289	502.3	698.2	1200.5	0.7036	0.7185	1.4221	512.0
516.0	784.76	0.02081	0.55997	0.58079	507.1	692.7	1199.8	0.7085	0.7099	1.4183	516.0
520.0	812.53	0.02091	0.53864	0.55956	512.0	687.0	1199.0	0.7133	0.7013	1.4146	520.0
524.0	841.04	0.02102	0.51814	0.53916	516.9	681.3	1198.2	0.7182	0.6926	1.4108	524.0
528.0	870.31	0.02112	0.49843	0.51955	521.8	675.5	1197.3	0.7231	0.6839	1.4070	528.0
532.0	900.34	0.02123	0.47947	0.50070	526.8	669.6	1196.4	0.7280	0.6752	1.4032	532.0
536.0	931.17	0.02134	0.46123	0.48257	531.7	663.6	1195.4	0.7329	0.6665	1.3993	536.0
540.0	962.79	0.02146	0.44367	0.46513	536.8	657.5	1194.3	0.7378	0.6577	1.3954	540.0
544.0	995.22	0.02157	0.42677	0.44834	541.8	651.3	1193.1	0.7427	0.6489	1.3915	544.0
548.0	1028.49	0.02169	0.41048	0.43217	546.9	645.0	1191.9	0.7476	0.6400	1.3876	548.0
552.0	1062.59	0.02182	0.39479	0.41660	552.0	638.5	1190.6	0.7525	0.6311	1.3837	552.0
556.0	1097.55	0.02194	0.37966	0.40160	557.2	632.0	1189.2	0.7575	0.6222	1.3797	556.0
560.0	1133.38	0.02207	0.36507	0.38714	562.4	625.3	1187.7	0.7625	0.6132	1.3757	560.0
564.0	1170.10	0.02221	0.35099	0.37320	567.6	618.5	1186.1	0.7674	0.6041	1.3716	564.0
568.0	1207.72	0.02235	0.33741	0.35975	572.9	611.5	1184.5	0.7725	0.5950	1.3675	568.0
572.0	1246.26	0.02249	0.32429	0.34678	578.3	604.5	1182.7	0.7775	0.5859	1.3634	572.0
576.0	1285.74	0.02264	0.31162	0.33426	583.7	597.2	1180.9	0.7825	0.5766	1.359	576.0
580.0	1326.17	0.02279	0.29937	0.32216	589.1	589.9	1179.0	0.7876	0.5673	1.3550	580.0
584.0	1367.7	0.02295	0.28753	0.31048	594.6	582.4	1176.9	0.7927	0.5580	1.3507	584.0
588.0	1410.0	0.02311	0.27608	0.29919	600.1	574.7	1174.8	0.7978	0.5485	1.3464	588.0
592.0	1453.3	0.02328	0.26499	0.28827	605.7	566.8	1172.6	0.8030	0.5390	1.3420	592.0
596.0	1497.8	0.02345	0.25425	0.27770	611.4	558.8	1170.2	0.8082	0.5293	1.3375	596.0
600.0	1543.2	0.02364	0.24384	0.26747	617.1	550.6	1167.7	0.8134	0.5196	1.3330	600.0
604.0	1589.7	0.02382	0.23374	0.25757	622.9	542.2	1165.1	0.8187	0.5097	1.3284	604.0
608.0	1637.3	0.02402	0.22394	0.24796	628.8	533.6	1162.4	0.8240	0.4997	1.3238	608.0
612.0	1686.1	0.02422	0.21442	0.23865	634.8	524.7	1159.5	0.8294	0.4896	1.3190	612.0
616.0	1735.9	0.02444	0.20516	0.22960	640.8	515.6	1156.4	0.8348	0.4794	1.3141	616.0
620.0	1786.9	0.02466	0.19615	0.22081	646.9	506.3	1153.2	0.8403	0.4689	1.3092	620.0
624.0	1839.0	0.02489	0.18737	0.21226	653.1	496.6	1149.8	0.8458	0.4583	1.3041	624.0
628.0	1892.4	0.02514	0.17880	0.20394	659.5	486.7	1146.1	0.8514	0.4474	1.2988	628.0
632.0	1947.0	0.02539	0.17044	0.19583	665.9	476.4	1142.2	0.8571	0.4364	1.2934	632.0
636.0	2002.8	0.02566	0.16226	0.18792	672.4	465.7	1138.1	0.8628	0.4251	1.2879	636.0
640.0	2059.9	0.02595	0.15427	0.18021	679.1	454.6	1133.7	0.8686	0.4134	1.2821	640.0
644.0	2118.3	0.02625	0.14644	0.17269	685.9	443.1	1129.0	0.8746	0.4015	1.2761	644.0
648.0	2178.1	0.02657	0.13876	0.16534	692.9	431.1	1124.0	0.8806	0.3893	1.2699	648.0
652.0	2239.2	0.02691	0.13124	0.15816	700.0	418.7	1118.7	0.8868	0.3767	1.2634	652.0
656.0	2301.7	0.02728	0.12387	0.15115	707.4	405.7	1113.1	0.8931	0.3637	1.2567	656.0
660.0	2365.7	0.02768	0.11662	0.14431	714.9	392.1	1107.0	0.8995	0.3502	1.2498	660.0
664.0	2431.1	0.02811	0.10947	0.13757	722.9	377.7	1100.6	0.9064	0.3361	1.2425	664.0
668.0	2498.1	0.02858	0.10229	0.13087	731.5	362.1	1093.5	0.9137	0.3210	1.2347	668.0
672.0	2566.6	0.02911	0.09514	0.12424	740.2	345.7	1085.9	0.9212	0.3054	1.2266	672.0
676.0	2636.8	0.02970	0.08799	0.11769	749.2	328.5	1077.6	0.9287	0.2892	1.2179	676.0
680.0	2708.6	0.03037	0.08080	0.11117	758.5	310.1	1068.5	0.9365	0.2720	1.2086	680.0
684.0	2782.1	0.03114	0.07349	0.10463	768.2	290.2	1058.4	0.9447	0.2537	1.1984	684.0
688.0	2857.4	0.03204	0.65950	0.09799	778.8	268.2	1047.0	0.9535	0.2337	1.1872	688.0
692.0	2934.5	0.03313	0.05797	0.09110	790.5	243.1	1033.6	0.9634	0.2110	1.1744	692.0
696.0	3013.4	0.03455	0.04916	0.08371	804.4	212.8	1017.2	0.9749	0.1841	1.1591	696.0
700.0	3094.3	0.03662	0.03857	0.07519	822.4	172.7	995.2	0.9901	0.1490	1.1390	700.0
702.0	3135.5	0.03824	0.03173	0.06997	835.0	144.7	979.7	1.0006	0.1246	1.1252	702.0
704.0	3177.2	0.04108	0.02192	0.06300	854.2	102.0	956.2	1.0169	0.0876	1.1046	704.0
705.0	3198.3	0.04427	0.01304	0.05730	873.0	61.4	934.4	1.0329	0.0527	1.0856	705.0
705.47*	3208.2	0.05078	0.00000	0.05078	906.0	0.0	906.0	1.0612	0.0000	1.0612	705.47*

Table 2: Saturated Steam: Pressure Table

		Specific Volume			Enthalpy			Entropy			
Abs Press. Lb/Sq in p	Temp Fahr t	Sat. Liquid vf	Evap vf_g	Sat. Vapor v_g	Sat. Liquid h_f	Evap. hf_g	Sat. Vapor h_g	Sat. Liquid s_f	Evap. sf_g	Sat. Vapor s_g	Abs Press Lb/Sq in p
0.08865	32.018	0.016022	3302.4	3302.4	0.0003	1075.5	1075.5	0.0000	2.1872	2.1872	0.08865
0.25	59.323	0.016032	1235.5	1235.5	27.382	1060.1	1087.4	0.0542	2.0425	2.0967	0.25
0.5	79.586	0.016071	641.5	641.5	47.623	1048.6	1096.3	0.0925	1.9446	2.0370	0.5
1.0	101.74	0.016136	333.59	333.59	69.73	1036.1	1105.8	0.1326	1.8455	1.9781	1.0
5.0	162.24	0.016407	73.515	73.515	130.20	1000.9	1131.1	0.2349	1.6094	1.8443	5.0
10.0	193.21	0.016592	38.404	38.404	161.26	982.1	1143.3	0.2836	1.5043	1.7879	10.0
14.696	212.00	0.016719	26.782	26.782	180.17	970.3	1150.5	0.3121	1.4447	1.7568	14.696
15.0	213.03	0.016726	26.274	26.274	181.21	969.7	1150.9	0.3134	1.4415	1.7552	15.0
20.0	227.96	0.016834	20.070	20.07	196.27	960.1	1156.3	0.3358	1.3962	1.7300	20.0
30.0	250.34	0.017009	13.7266	13.7266	218.9	945.2	1164.1	0.3682	1.3313	1.6995	30.0
40.0	267.25	0.017151	10.4794	10.4794	236.1	933.6	1169.8	0.3921	1.2844	1.6765	40.0
50.0	281.02	0.017274	8.4967	8.5140	250.2	923.9	1174.1	0.4112	1.2474	1.6586	50.0
60.0	292.71	0.017383	7.1562	7.1736	262.2	915.4	1177.6	0.4273	1.2167	1.6440	60.0
70.0	302.93	0.017482	6.1875	6.2050	272.7	907.8	1180.6	0.4411	1.1905	1.6316	70.0
80.0	312.04	0.017573	5.4536	5.4711	282.1	900.9	1183.1	0.4534	1.1675	1.6208	80.0
90.0	320.28	0.017659	4.8779	4.8953	290.7	894.6	1185.3	0.4643	1.1470	1.6113	90.0
100.0	327.82	0.017740	4.4133	4.4310	298.5	888.6	1187.2	0.4743	1.1284	1.6027	100.0
110.0	334.79	0.01782	4.0306	4.0484	305.8	883.1	1188.9	0.4834	1.1115	1.5950	110.0
120.0	341.27	0.01789	3.7097	3.7275	312.6	877.8	1190.4	0.4919	1.096	1.5879	120.0
130.0	347.33	0.01796	3.4364	3.4544	319.0	872.8	1191.7	0.4998	1.0815	1.5813	130.0
140.0	353.04	0.01803	3.2010	3.2190	325.0	838.0	1193.0	0.5071	1.0681	1.5752	140.0
150.0	358.43	0.01809	2.9958	3.0139	330.6	863.4	1194.1	0.5141	1.0554	1.5695	150.0
160.0	363.55	0.01815	2.8155	2.8336	336.1	859.0	1195.1	0.5206	1.0435	1.5641	160.0
170.0	368.42	0.01821	2.6556	2.6738	341.2	854.8	1196.0	0.5269	1.0322	1.5591	170.0
180.0	373.08	0.01827	2.5129	2.5312	346.2	850.7	1196.9	0.5328	1.0215	1.5543	180.0
190.0	377.53	0.01833	2.3847	2.4030	350.9	846.7	1197.6	0.5384	1.0113	1.5498	190.0
200.0	387.80	0.01839	2.2689	2.2873	355.5	842.8	1198.3	0.5438	1.0016	1.5454	200.0
210.0	385.91	0.01844	2.16373	2.18217	359.9	839.1	1199.0	0.5490	0.9923	1.5413	210.0
220.0	389.88	0.01850	2.07790	2.08629	364.2	835.4	1199.6	0.5540	0.9834	1.5374	220.0
230.0	393.70	0.01855	1.97991	1.99846	368.3	831.8	1200.1	0.5588	0.9748	1.5336	230.0
240.0	397.39	0.01860	1.89909	1.91769	372.3	828.4	1200.6	0.5634	0.9665	1.5299	240.0
250.0	400.97	0.01865	1.82452	1.84317	376.1	825.0	1201.1	0.5679	0.9585	1.5264	250.0
260.0	404.44	0.01870	1.75548	1.77418	379.9	821.6	1201.5	0.5722	0.9508	1.5230	260.0
270.0	407.80	0.01875	1.69137	1.71013	383.6	818.3	1201.9	0.5764	0.9433	1.5197	270.0
280.0	411.07	0.01880	1.63169	1.65049	387.1	815.1	1202.3	0.5805	0.9361	1.5166	280.0
290.0	414.25	0.01885	1.57597	1.59482	390.6	812.0	1202.6	0.5844	0.9291	1.5135	290.0
300.0	417.35	0.01889	1.52384	1.54274	394.0	808.9	1202.9	0.5882	0.9223	1.5105	300.0
350.0	431.73	0.01912	1.30642	1.32554	409.8	794.2	1204.0	0.6059	0.8909	1.4968	350.0
400.0	444.60	0.01934	1.14162	1.16095	424.2	780.4	1204.6	0.6217	0.863	1.4847	400.0
450.0	456.28	0.01954	1.01224	1.03179	437.3	767.5	1204.8	0.6360	0.8378	1.4738	450.0
500.0	467.01	0.01975	0.90787	0.92762	449.5	755.1	1204.7	0.6490	0.8148	1.4639	500.0
550.0	476.94	0.01994	0.82183	0.84177	460.9	743.3	1204.3	0.6611	0.7936	1.4547	550.0
600.0	486.20	0.02013	0.74962	0.76975	471.7	732.0	1203.7	0.6723	0.7738	1.4461	600.0
650.0	494.89	0.02032	0.68811	0.70843	481.9	720.9	1202.8	0.6828	0.7552	1.4381	650.0
700.0	503.08	0.02050	0.06351	0.65556	491.6	710.2	1201.8	0.6928	0.7377	1.4304	700.0
750.0	510.84	0.02069	0.58880	0.60949	500.9	699.8	1200.7	0.7022	0.721	1.4232	750.0
800.0	518.21	0.02087	0.54809	0.56896	509.8	689.6	1199.4	0.7111	0.7051	1.4163	800.0
850.0	525.24	0.02105	0.51197	0.53302	518.4	679.5	1198.0	0.7197	0.689	1.4096	850.0
900.0	531.95	0.02123	0.47968	0.50091	526.7	669.7	1196.4	0.7279	0.6753	1.4032	900.0
950.0	538.39	0.02141	0.45064	0.47205	531.7	660.0	1194.7	0.7358	0.6612	1.3970	950.0
1000.0	544.58	0.02159	0.42436	0.44596	542.6	650.4	1192.9	0.7434	0.6476	1.3910	1000.0
1050.0	550.53	0.02177	0.40047	0.42224	550.1	640.9	1191.0	0.7507	0.6344	1.3851	1050.0
1100.0	556.28	0.02195	0.37863	0.40058	557.5	631.5	1189.1	0.7578	0.6216	1.3794	1100.0
1150.0	561.82	0.02214	0.35859	0.38073	564.8	622.2	1187.0	0.7647	0.6091	1.3738	1150.0
1200.0	567.19	0.02232	0.34013	0.36245	571.9	613.0	1184.8	0.7714	0.5969	1.3683	1200.0
1250.0	572.38	0.02250	0.32306	0.34556	578.8	603.8	1182.6	0.7780	0.585	1.3630	1250.0
1300.0	577.42	0.02269	0.30722	0.32991	585.6	594.6	1180.2	0.7843	0.5733	1.3577	1300.0
1350.0	582.32	0.02288	0.29250	0.31537	592.3	585.4	1177.8	0.7906	0.562	1.3525	1350.0
1400.0	587.07	0.02307	0.27871	0.30178	598.8	576.5	1175.3	0.7966	0.5507	1.3474	1400.0
1450.0	591.70	0.02327	0.26584	0.28911	605.3	567.4	1172.8	0.8026	0.5397	1.3423	1450.0
1500.0	596.20	0.02346	0.25372	0.27719	611.7	558.4	1170.1	0.8085	0.5288	1.3373	1500.0
1550.0	600.59	0.02366	0.24235	0.26601	618.0	549.4	1167.4	0.8142	0.5182	1.3324	1550.0
1600.0	604.87	0.02387	0.23159	0.25545	624.2	540.3	1164.5	0.8199	0.8076	1.3274	1600.0
1650.0	609.05	0.02407	0.22143	0.24551	630.4	531.3	1161.6	0.8254	0.7971	1.3225	1650.0
1700.0	613.13	0.02428	0.21178	0.23607	636.5	522.2	1158.6	0.8309	0.4867	1.3176	1700.0
1750.0	617.12	0.02450	0.20263	0.22713	642.5	513.1	1155.6	0.8363	0.4765	1.3128	1750.0
1800.0	621.02	0.02472	0.19390	0.21861	648.5	503.8	1152.3	0.8417	0.4662	1.3079	1800.0
1850.0	624.83	0.02495	0.18558	0.21052	654.5	494.6	1149.0	0.8470	0.4561	1.3030	1850.0
1900.0	628.56	0.02517	0.17761	0.20278	660.4	485.2	1145.6	0.8522	0.4459	1.2981	1900.0
1950.0	632.22	0.02541	0.16999	0.19540	666.3	475.8	1142.0	0.8574	0.4358	1.2931	1950.0

Table 2: Saturated Steam: Pressure Table — *continued*

Abs Press. Lb/Sq in p	Temp Fahr t	Specific Volume Sat. Liquid vf	Evap vf_g	Sat. Vapor v_g	Enthalpy Sat. Liquid h_f	Evap. hf_g	Sat. Vapor h_g	Entropy Sat. Liquid s_f	Evap. sf_g	Sat. Vapor s_g	Abs Press Lb/Sq in p
2000.0	635.80	0.02565	0.16266	0.18831	672.1	466.2	1138.3	0.8625	0.4256	1.2881	2000.0
2100.0	642.76	0.02615	0.14885	0.17501	683.8	446.7	1130.5	0.8727	0.4053	1.2780	2100.0
2200.0	649.45	0.02669	0.13603	0.16272	695.5	426.7	1122.2	0.8828	0.3848	1.2676	2200.0
2300.0	655.89	0.02727	0.12406	0.15133	707.2	406.0	1113.2	0.8929	0.3640	1.2569	2300.0
2400.0	662.11	0.02790	0.11287	0.14076	719.0	384.8	1103.7	0.9031	0.3430	1.2460	2400.0
2500.0	668.11	0.02859	0.10209	0.13068	731.7	361.6	1093.3	0.9139	0.3206	1.2345	2500.0
2600.0	673.91	0.02938	0.09172	0.12110	744.5	337.6	1082.0	0.9247	0.2977	1.2225	2600.0
2700.0	679.53	0.03029	0.08165	0.11194	757.3	312.3	1069.7	0.9356	0.2741	1.2097	2700.0
2800.0	684.96	0.03134	0.07171	0.10305	770.7	285.1	1055.8	0.9468	0.2491	1.1958	2800.0
2900.0	690.22	0.03262	0.06158	0.09420	785.1	254.7	1039.8	0.9588	0.2215	1.1803	2900.0
3000.0	695.33	0.03428	0.05073	0.08500	801.8	218.4	1020.3	0.9728	0.1891	1.1619	3000.0
3100.0	700.28	0.03681	0.03771	0.07452	824.0	169.3	993.3	0.9914	0.1460	1.1373	3100.0
3200.0	705.08	0.04472	0.01191	0.05663	875.5	56.1	931.6	1.0351	0.0482	1.0832	3200.0
3208.2*	705.47	0.05078	0.00000	0.05078	906.0	0.0	906.0	1.0612	0.0000	1.0612	3208.2*

*Critical pressure

Table 3: Superheated Steam

Abs Press. Lb/Sq in (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
	Sh			98.26	148.26	198.26	248.26	298.26	348.26	398.26	498.26	598.26	698.26	798.26	898.26	998.26	1098.26
1	v	0.01614	333.6	392.5	422.4	452.3	482.1	511.9	541.7	571.5	631.1	690.7	750.3	809.8	869.4	929.0	988.6
(101.74)	h	69.73	1105.8	1150.2	1172.9	1195.7	1218.7	1241.8	1265.1	1288.6	1336.1	1384.5	1433.7	1483.8	1534.9	1586.8	1639.7
	s	0.1326	1.9781	2.0509	2.0841	2.1152	2.1445	2.1722	2.1985	2.2237	2.2708	2.3144	2.3551	2.3934	2.4296	2.4640	2.4969
	Sh			37.76	87.76	137.76	187.76	237.76	287.76	337.76	437.76	537.76	637.76	737.76	837.76	937.76	1037.76
5	v	0.01641	73.53	78.14	84.21	90.24	96.25	102.24	108.23	114.21	126.15	183.08	150.01	161.94	173.86	185.78	197.70
(162.24)	h	130.20	1131.1	1148.6	1171.7	1194.8	1218.0	1241.3	1264.7	1288.2	1335.9	1384.3	1433.6	1483.7	1534.7	1586.7	1639.6
	s	0.2349	1.8443	1.8716	1.9054	1.9369	1.9664	1.9943	2.0208	2.0460	2.0932	2.1369	2.1776	2.2159	2.2521	2.2866	2.3194
	Sh			6.79	56.79	106.79	156.79	206.79	256.79	306.79	406.79	506.79	606.79	706.79	806.79	906.79	1006.79
10	v	0.01659	38.42	38.84	41.93	44.98	48.02	51.03	54.04	57.04	63.03	69.00	74.98	80.94	86.91	92.87	98.84
(193.21)	h	161.26	1143.3	1146.6	1170.2	1193.7	1217.1	1240.6	1264.1	1287.8	1335.5	1384.0	1433.4	1483.5	1534.6	1586.6	1639.5
	s	0.2836	1.7879	1.7928	1.8273	1.8593	1.8892	1.9173	1.9439	1.9692	2.0166	2.0603	2.1011	2.1394	2.1757	2.2101	2.2430
	Sh				38.00	88.00	138.00	188.00	238.00	288.00	388.00	488.00	588.00	688.00	788.00	888.00	988.00
14.696	v	.0167	26.799		28.42	30.52	32.60	34.67	36.72	38.77	42.86	46.93	51.00	55.06	59.13	63.19	67.25
(212.00)	h	180.17	1150.5		1168.8	1192.6	1216.3	1239.9	1263.6	1287.4	1335.2	1383.8	1433.2	1483.4	1534.5	1586.5	1639.4
	s	.3121	1.7568		1.7833	1.8158	1.8459	1.8743	1.9010	1.9265	1.9739	2.0177	2.0585	2.0969	2.1332	2.1676	2.2005
	Sh				36.97	86.97	136.97	186.97	236.97	286.97	386.97	486.97	586.97	686.97	786.97	886.97	986.97
15	v	0.01673	26.290		27.837	29.899	31.939	33.963	35.977	37.985	41.986	45.987	49.964	53.946	57.926	61.905	65.882
(213.03)	h	181.21	1150.9		1168.7	1192.5	1216.2	1239.9	1263.6	1287.3	1335.2	1383.8	1433.2	1483.4	1534.5	1586.5	1639.4
	s	0.3137	1.7552		1.7809	1.8134	1.8437	1.8720	1.8988	1.9242	1.9717	2.0155	2.0563	2.0946	2.1309	2.1653	2.1982
	Sh				22.04	72.04	122.04	172.04	222.04	272.04	372.04	472.04	572.04	672.04	772.04	872.04	972.04
20	v	0.01683	20.087		20.788	22.356	23.900	25.428	26.946	28.457	31.466	34.465	37.458	40.447	43.435	46.420	49.405
(227.96)	h	196.27	1156.3		1167.1	1191.4	1215.4	1239.2	1263.0	1286.9	1334.9	1383.5	1432.9	1483.2	1534.3	1586.3	1639.3
	s	0.3358	1.7320		1.7475	1.7805	1.8111	1.8397	1.8666	1.8921	1.9397	1.9836	2.0244	2.0628	2.0991	2.1336	2.1665
	Sh				9.93	59.93	109.93	159.93	209.93	259.93	359.93	459.93	559.93	659.93	759.93	89.93	959.93
25	v	0.01693	16.301		16.558	17.829	19.076	20.307	21.527	22.740	25.153	27.557	29.954	32.348	34.740	37.130	39.518
(240.07)	h	208.52	1160.6		1165.6	1190.2	1214.5	1238.5	1262.5	1286.4	1334.6	1383.3	1432.7	1483.0	1534.2	1586.2	1639.2
	s	0.3535	1.7141		1.7212	1.7547	1.7856	1.8145	1.8415	1.8672	1.9149	1.9588	1.9997	2.0381	2.0744	2.1089	2.1418
	Sh					49.66	99.66	149.66	199.66	249.66	349.66	449.66	549.66	649.66	749.66	849.66	949.66
30	v	0.01701	13.744			14.810	15.859	16.892	17.914	18.929	20.945	22.951	24.952	26.949	28.943	30.936	32.927
(250.34)	h	218.93	1164.1			1189.0	1213.6	1237.8	1261.9	1286.0	1334.2	1383.0	1432.5	1482.8	1534.0	1586.1	1639.0
	s	0.3682	1.6995			1.7334	1.7647	1.7937	1.8210	1.8467	1.8946	1.9386	1.9795	2.0179	2.0543	2.0888	2.1217
	Sh					40.71	90.71	140.71	190.71	240.71	340.71	440.71	540.71	640.71	740.71	840.71	940.71
35	v	0.01708	11.896			12.654	13.562	14.453	15.334	16.207	17.939	19.662	21.379	23.09	24.803	26.512	28.220
(259.29)	h	228.03	1167.1			1187.8	1212.7	1237.1	1261.3	1285.5	1333.9	1382.8	1432.3	1482.7	1533.9	1586.0	1638.9
	s	0.3809	1.6872			1.7152	1.7468	1.7761	1.8035	1.8294	1.8774	1.9214	1.9624	2.0009	2.0372	2.0717	2.1046
	Sh					32.75	82.75	132.75	182.75	232.75	332.75	432.75	532.75	632.75	732.75	832.75	932.75
40	v	0.01715	10.497			11.036	11.838	12.624	13.398	14.165	15.685	17.195	18.699	20.199	21.697	23.194	24.689
(267.25)	h	236.14	1169.8			1186.6	1211.7	1236.4	1260.8	1285.0	1333.6	1382.5	1432.1	1482.5	1533.7	1585.8	1638.8
	s	0.3921	1.6765			1.6992	1.7312	1.7608	1.7883	1.8143	1.8624	1.9065	1.9476	1.9860	2.0224	2.0569	2.0899
	Sh					25.56	75.56	125.56	175.56	225.56	325.56	425.56	525.56	625.56	725.56	825.56	925.56
45	v	0.01721	9.399			9.777	10.497	11.201	11.892	12.577	13.932	15.276	16.614	17.950	19.282	20.613	21.943
(274.44)	h	243.49	1172.1			1185.4	1210.4	1235.7	1260.2	1284.6	1333.3	1382.3	1431.9	1482.3	1533.6	1585.7	1638.7
	s	0.4021	1.6671			1.6849	1.7173	1.7471	1.7748	1.8010	1.8492	1.8934	1.9346	1.9730	2.0093	2.0439	2.0768
	Sh					18.98	68.98	118.98	168.98	218.98	318.98	418.98	518.98	618.98	718.98	818.98	918.98
50	v	0.01727	8.514			8.769	9.424	10.062	10.688	11.306	12.529	13.741	14.947	16.150	17.350	18.549	19.746
(281.02)	h	250.21	1174.1			1184.1	1209.9	1234.9	1259.6	1284.1	1332.9	1382.0	1431.7	1482.2	1533.4	1585.6	1638.6
	s	0.4112	1.6586			1.6720	1.7048	1.7349	1.7628	1.7890	1.8374	1.8816	1.9227	1.9613	1.9977	2.0322	2.0652
	Sh					12.93	62.93	112.93	162.93	212.93	312.93	412.93	512.93	612.93	712.93	812.93	912.93
55	v	0.01733	7.787			7.945	8.546	9.130	9.702	10.267	11.381	12.485	13.583	14.677	15.769	16.859	17.948
(287.07)	h	256.43	1176.0			1182.9	1208.9	1234.2	1259.1	1283.6	1332.6	1381.8	1431.5	1482.0	1533.3	1585.5	1638.5
	s	0.4196	1.6510			1.6601	1.6933	1.7237	1.7518	1.7781	1.8266	1.8710	1.9121	1.9507	1.987	2.022	2.055
	Sh					7.29	57.29	107.29	157.29	207.29	307.29	407.29	507.29	607.29	707.29	807.29	907.29
60	v	0.01738	7.174			7.257	7.815	8.354	8.881	9.400	10.425	11.438	12.446	13.450	14.452	15.452	16.450
(292.71)	h	262.21	1177.6			1181.6	1208.0	1233.5	1258.5	1283.2	1332.3	1381.5	1431.3	1481.8	1533.2	1585.3	1638.4
	s	0.4273	1.6440			1.6492	1.6829	1.7134	1.7417	1.7681	1.8168	1.8612	1.9024	1.9410	1.9774	2.0120	2.0450
	Sh					2.02	52.02	102.02	152.02	202.02	302.02	402.02	502.02	602.02	702.02	802.02	902.02
65	v	0.01743	6.653			6.675	7.195	7.697	8.186	8.667	9.615	10.552	11.484	12.412	13.337	14.261	15.183
(297.98)	h	267.63	1179.1			1180.3	1207.0	1232.7	1257.9	1282.7	1331.9	1381.3	1431.1	1481.6	1533.0	1585.2	1638.3
	s	0.4344	1.6375			1.6390	1.6731	1.7040	1.7324	1.7590	1.8077	1.8522	1.8935	1.9321	1.9685	2.0031	2.0361
	Sh						47.07	97.07	147.07	197.07	297.07	397.07	497.07	597.07	697.07	797.07	897.07
70	v	0.01748	6.205				6.664	7.133	7.590	8.039	8.922	9.793	10.659	11.522	12.382	13.240	14.09
(302.93)	h	272.74	1180.6				1206.0	1232.0	1257.3	1282.2	1331.6	1381.0	1430.9	1481.5	152.9	1585.1	1638.2
	s	0.4411	1.6316				1.6640	1.6951	1.7237	1.7504	1.7993	1.8439	1.8852	1.9238	1.9603	1.9949	2.0279
	Sh						42.39	92.39	142.39	192.39	292.39	392.39	492.39	529.39	692.39	792.39	892.39
75	v	0.01753	5.814				6.204	6.645	7.074	7.494	8.320	9.135	9.945	10.750	11.553	12.355	13.155
(307.61)	h	277.56	1181.9				1205.0	1231.2	1256.7	1281.7	1331.3	1380.7	1430.7	1481.3	1532.7	1585.0	1638.1
	s	0.4474	1.6260				1.6554	1.6868	1.7156	1.7424	1.7915	1.8361	1.8774	1.9161	1.9526	1.9872	2.0202

Sh = superheat, F
v = specific volume, cu ft per lb
h = enthalpy, Btu per lb
s = entropy, Btu per R per lb

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 350	400	450	500	550	600	700	800	900	1000	1100	1200	1300	1400
	Sh			37.96	87.96	137.96	187.96	237.96	287.96	387.96	487.96	587.96	687.96	787.96	887.96	987.96	1087.96
80	v	0.01757	5.471	5.801	6.218	6.622	7.018	7.408	7.794	8.560	9.319	10.075	10.829	11.581	12.331	13.081	13.829
(312.04)	h	282.15	1183.1	1204.0	1230.5	1256.1	1281.3	1306.2	1330.9	1380.5	1430.5	1481.1	1532.6	1584.9	1638.0	1692.0	1746.8
	s	0.4534	1.6208	1.6473	1.6790	1.7080	1.7349	1.7602	1.7842	1.8289	1.8702	1.9089	1.9454	1.9800	2.0131	2.0446	2.0750
	Sh			33.74	83.74	133.74	183.74	233.74	283.74	383.74	483.74	583.74	683.74	783.74	883.74	983.74	1083.74
85	v	0.01762	5.167	5.445	5.840	6.223	6.597	6.966	7.330	8.052	8.768	9.480	10.190	10.898	11.604	12.310	13.014
(316.26)	h	286.52	1184.2	1203.0	1229.7	1255.5	1280.8	1305.8	1330.6	1380.2	1430.3	1481.0	1532.4	1584.7	1637.9	1691.9	1746.8
	s	0.4590	1.6159	1.6396	1.6716	1.7008	1.7279	1.7532	1.7772	1.8220	1.8634	1.9021	1.9386	1.9733	2.0063	2.0379	2.0682
	Sh			29.72	79.72	129.72	179.72	229.72	279.72	379.72	479.72	579.72	679.72	779.72	879.72	979.72	1079.72
90	v	0.01766	4.895	5.128	5.505	5.869	6.223	6.572	6.917	7.600	8.277	8.950	9.621	10.290	10.958	11.625	12.290
(320.28)	h	290.69	1185.3	1202.0	1228.9	1254.9	1280.3	1305.4	1330.2	1380.0	1430.1	1480.8	1532.3	1584.6	1637.8	1691.8	1746.7
	s	0.4643	1.6113	1.6323	1.6646	1.6940	1.7212	1.7467	1.7707	1.8156	1.8570	1.8957	1.9323	1.9669	2.0000	2.0316	2.0619
	Sh			25.87	75.87	125.87	175.87	225.87	275.87	375.87	475.87	575.87	675.87	775.87	875.87	975.87	1075.87
95	v	0.01770	40651	4.845	5.205	5.551	5.889	6.221	6.548	7.196	7.838	8.477	9.113	9.747	10.380	11.012	11.643
(324.13)	h	294.70	1186.2	1200.9	1228.1	1254.3	1279.8	1305.0	1329.9	1379.7	1429.9	1480.6	1532.1	1584.5	1637.7	1691.7	1746.6
	s	0.4634	1.6069	1.6253	1.6580	1.6876	1.7149	1.7404	1.7645	1.8094	1.8509	1.8897	1.9262	1.9609	1.9940	2.0256	2.0559
	Sh			22.18	72.18	122.18	172.18	222.18	272.18	372.18	472.18	572.18	672.18	772.18	872.18	972.18	1072.18
100	v	0.01774	4.431	4.590	4.935	5.266	5.588	5.904	6.216	6.833	7.443	8.050	8.655	9.258	9.860	10.460	11.060
(327.82)	h	298.54	1187.2	1199.9	1227.4	1253.7	1279.3	1304.6	1329.6	1379.5	1429.7	1480.4	1532.0	1584.4	1637.6	1691.6	1746.5
	s	0.4743	1.6027	1.6187	1.6516	1.6814	1.7088	1.7344	1.7586	1.8036	1.8451	1.8839	1.9205	1.9552	1.9883	2.0199	2.0502
	Sh			18.63	68.63	118.63	168.63	218.63	268.63	368.63	468.63	568.63	668.63	768.63	868.63	968.63	1068.63
105	v	0.01778	4.231	4.359	4.690	5.007	5.315	5.617	5.915	6.504	7.086	7.665	8.241	8.816	9.389	9.961	10.532
(331.37)	h	302.24	1188.0	1198.8	1226.6	1253.1	1278.8	1304.2	1329.2	1379.2	1429.4	1480.3	1531.8	1584.2	1637.5	1691.5	1746.4
	s	0.4790	1.5988	1.6122	1.6455	1.6755	1.7031	1.7288	1.7530	1.7981	1.8396	1.8785	1.9151	1.9498	1.9828	2.0145	2.0448
	Sh			15.21	65.21	115.21	165.21	215.21	265.21	365.21	465.21	565.21	665.21	765.21	865.21	965.21	1065.21
110	v	0.01782	4.048	4.149	4.468	4.772	5.068	5.357	5.642	6.205	6.761	7.314	7.865	8.413	8.961	9.507	10.053
(334.79)	h	305.80	1188.9	1197.7	1225.8	1252.5	1278.3	1303.8	1328.9	1379.0	1429.2	1480.1	1531.7	1584.1	1637.4	1691.4	1746.4
	s	0.4834	1.5950	1.6061	1.6396	1.6698	1.6975	1.7233	1.7476	1.7928	1.8344	1.8732	1.9099	1.9446	1.9777	2.0093	2.0397
	Sh			11.92	61.92	111.92	161.92	211.92	261.92	361.92	461.92	561.92	661.92	761.92	861.92	9611.92	1061.92
115	v	0.01785	3.881	3.957	4.265	4.558	4.841	5.119	5.392	5.932	6.465	6.994	7.521	8.046	8.570	9.093	9.615
(338.08)	h	309.25	1189.6	1196.7	1125.0	1251.8	1277.9	1303.3	1328.6	1378.7	1429.0	1479.9	1531.6	1584.0	1637.2	1691.4	1746.3
	s	0.4877	1.5913	1.6001	1.6340	1.6644	1.6922	1.7181	1.7425	1.7877	1.8294	1.8682	1.9049	1.9396	1.9727	2.0044	2.0347
	Sh			8.73	58.73	108.73	158.73	208.73	258.73	358.73	458.73	558.73	658.73	758.73	858.73	958.73	1058.73
120	v	0.01789	3.7275	3.7815	4.0786	4.3610	4.6341	4.9009	5.1637	5.6813	6.1928	6.7006	7.2060	7.7096	8.2119	8.7130	9.2134
(341.27)	h	312.58	1190.4	1195.6	1224.1	1251.2	1277.4	1302.9	1328.2	1378.4	1428.8	1479.8	1531.4	1583.9	1637.1	1691.3	1746.2
	s	0.4919	1.5879	1.5943	1.6286	1.6592	1.6872	1.7132	1.7376	1.7829	1.8246	1.8635	1.9001	1.9349	1.9680	1.9996	2.0300
	Sh			2.67	52.67	102.67	152.67	202.67	252.67	352.67	452.67	552.67	652.67	752.67	852.67	952.67	1052.67
130	v	0.01796	3.4544	3.4699	3.7489	4.0129	4.2672	4.5151	4.7589	5.2384	5.7118	6.1814	6.6486	7.1140	7.5781	8.0411	8.5033
(347.33)	h	318.95	1191.7	1193.4	1222.5	1249.9	1276.4	1302.1	1327.5	1377.9	1428.4	1479.4	1531.1	1583.6	1636.9	1691.1	1746.1
	s	0.4998	1.5813	1.5833	1.6182	1.6493	1.6775	1.7037	1.7283	1.7737	1.8155	1.8545	1.8911	1.9259	1.9591	1.9907	2.0211
	Sh				46.96	96.96	146.96	196.96	246.96	346.96	446.96	546.96	646.96	746.96	846.96	946.96	1046.96
140	v	0.01803	3.2190		3.4661	3.7143	3.9526	4.1844	4.4119	4.8588	5.2995	5.7364	6.1709	6.6036	7.0349	7.4652	7.8946
(353.04)	h	324.96	1193.0		1120.8	1248.7	1275.3	1301.3	1326.8	1377.4	1428.0	1479.1	1530.8	1583.4	1636.7	1690.9	1745.9
	s	0.5071	1.5752		1.6085	1.6400	1.6686	1.6949	1.7196	1.7652	1.8071	1.8461	1.8828	1.9176	1.9508	1.9825	2.0129
	Sh				41.57	91.57	141.57	191.57	241.57	341.57	441.57	541.57	641.57	741.57	841.57	941.57	1041.57
150	v	0.01809	3.0139		3.2208	3.4555	3.6799	3.8978	4.1112	4.5298	4.9421	5.3507	5.7568	6.1612	6.5642	6.9661	7.3671
(358.43)	h	330.65	1194.1		1219.1	1247.4	1274.3	1300.5	1326.1	1376.9	1427.6	1478.7	1530.5	1583.1	1636.5	1690.7	1745.7
	s	0.5141	1.5695		1.5993	1.6313	1.6602	1.6867	1.7115	1.7573	1.7992	1.8383	1.8751	1.9099	1.9431	1.9748	2.0052
	Sh				36.45	86.45	136.45	186.45	236.45	336.45	436.45	536.45	636.45	736.45	836.45	936.45	1036.45
160	v	0.01815	2.8336		3.0060	3.2288	3.4413	3.6469	3.8480	4.2420	4.6295	5.0132	5.3945	5.7741	6.1522	6.5293	6.9055
(363.55)	h	336.07	1195.1		1217.4	1246.0	1273.3	1299.6	1325.4	1376.4	1424.2	1478.4	1530.3	1582.9	1636.3	1690.5	1745.6
	s	0.5206	1.5641		1.5906	1.6231	1.6522	1.6790	1.7039	1.7499	1.7919	1.8310	1.8678	1.9027	1.9359	1.9676	1.9980
	Sh				31.58	81.58	131.58	181.58	231.58	331.58	431.58	531.58	631.58	731.58	831.58	931.58	1031.58
170	v	0.01821	2.6738		2.8162	3.0288	3.2306	3.4255	3.6158	3.9879	4.3536	4.7155	5.0749	5.4325	5.7888	6.1440	6.4983
(368.42)	h	341.24	1196.0		1215.6	1244.7	1272.2	1298.8	1324.7	1375.8	1426.8	1478.0	1530.0	1582.6	1636.1	1690.4	1745.4
	s	0.5269	1.5591		1.5823	1.6152	1.6447	1.6717	1.6968	1.7428	1.7850	1.8241	1.8610	1.8959	1.9291	1.9608	1.9913
	Sh				26.92	76.92	126.92	176.92	226.92	326.92	426.92	526.92	626.92	726.92	826.92	926.92	1026.92
180	v	0.01827	2.5312		2.6474	2.8508	3.0433	3.2286	3.4093	3.7621	4.1084	4.4508	4.7907	5.1289	5.4657	5.8014	6.1363
(373.08)	h	346.19	1196.9		1213.8	1243.4	1271.2	1297.9	1324.0	1375.3	1426.3	1477.7	1529.7	1582.4	1635.9	1690.2	1745.3
	s	0.5328	1.5543		1.5743	1.6078	1.6376	1.6647	1.6900	1.7362	1.7784	1.8176	1.8545	1.8894	1.9227	1.9545	1.9849
	Sh				22.47	72.47	122.47	172.47	222.47	322.47	422.47	522.47	622.47	722.47	822.47	922.47	1022.47
190	v	0.01833	2.4030		2.4961	2.6915	2.8756	3.0525	3.2246	3.5601	3.8889	4.2140	4.5365	4.8572	5.1766	5.4949	5.8124
(377.53)	h	350.94	1197.6		1212.0	1242.0	1270.1	1297.1	1323.3	1374.8	1425.9	1477.4	1529.4	1582.1	1635.7	1690.0	1745.1
	s	0.5384	1.5498		1.5667	1.6006	1.6307	1.6581	1.6835	1.7299	1.7722	1.8115	1.8484	1.8834	1.9166	1.9484	1.9789
	Sh				18.20	68.20	118.20	168.20	218.20	318.20	418.20	518.20	618.20	718.20	818.20	918.20	1018.20
200	v	0.01839	2.2873		2.3598	2.5480	2.7247	2.8939	3.0583	3.3783	3.6915	4.0008	4.3077	4.6128	4.9165	5.2191	5.5209
(381.80)	h	355.51	1198.3		1210.1	1240.6	1269.0	1296.2	1322.6	1374.3	1425.5	1477.0	1529.1	1581.9	1635.4	1689.8	1745.0
	s	0.5438	1.5454		1.5593	1.5938	1.6242	1.6518	1.6773	1.7239	1.7663	1.8057	1.8426	1.8776	1.9109	1.9427	1.9732

Sh = superheat, F — h = enthalpy, Btu per lb

v = specific volume, cu ft per lb — s = entropy, Btu per R per lb”

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 400	450	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500
	Sh			14.09	64.09	114.09	164.09	214.09	314.09	414.09	514.09	614.09	714.09	814.09	914.09	1014.09	1114.09
210	v	0.01844	2.1822	2.2364	2.4181	2.5880	2.7504	2.9078	3.2137	3.5128	3.8080	4.1007	4.3915	4.6811	4.9695	5.2571	5.5440
(385.91)	h	359.91	1199.0	1208.2	1239.2	1268.0	1295.3	1321.9	1373.7	1425.1	1476.7	1528.8	1581.6	1635.2	1689.6	1744.8	1800.8
	s	0.5490	1.5413	1.5522	1.5872	1.6180	1.6458	1.6715	1.7182	1.7607	1.8001	1.8371	1.8721	1.9054	1.9372	1.9677	1.9970
	Sh			10.12	60.12	110.12	160.12	210.12	310.12	410.12	510.12	610.12	710.12	810.12	910.12	1010.12	1110.12
220	v	0.01850	2.0863	2.1240	2.2999	2.4638	2.6199	2.7710	3.0642	3.3504	3.6327	3.9125	4.1905	4.4671	4.7426	5.0173	5.2913
(389.88)	h	364.17	1199.6	1206.3	1237.8	1266.9	1294.5	1321.2	1373.2	1424.7	1476.3	1528.5	1581.4	1635.0	1689.4	1744.7	1800.6
	s	0.5540	1.5374	1.5453	1.5808	1.6120	1.6400	1.6658	1.7128	1.7553	1.7948	1.8318	1.8668	1.9002	1.9320	1.9625	1.9919
	Sh			6.30	56.30	106.30	156.30	206.30	306.30	406.30	506.30	606.30	706.30	806.30	906.30	1006.30	1106.30
230	v	0.01855	1.9985	2.0212	2.1919	2.3505	2.5008	2.6461	2.9276	3.2020	3.4726	3.7406	4.0068	4.2717	4.5355	4.7984	5.0606
(393.70)	h	368.28	1200.1	1204.4	1236.3	1265.7	1293.6	1320.4	1372.7	1424.2	1476.0	1528.2	1581.1	1634.8	1689.3	1744.5	1800.5
	s	0.5588	1.5336	1.5385	1.5747	1.6062	1.6344	1.6604	1.7075	1.7502	1.7897	1.8268	108618	1.8952	1.9270	1.9576	1.9869
	Sh			2.61	52.61	102.61	152.61	202.61	302.61	402.61	502.61	602.61	702.61	802.61	902.61	1002.61	1102.61
240	v	0.01860	1.9177	1.9268	2.0928	2.2462	2.3915	2.5316	2.824	3.0661	3.3259	3.5861	3.8385	4.0926	4.3456	4.5977	4.8492
(397.39)	h	372.27	1200.6	1202.4	1234.9	1264.6	1292.7	1319.7	1372.1	1423.8	1475.6	1527.9	1580.9	1634.6	1689.1	1744.3	1800.4
	s	0.5634	1.5299	1.5320	1.5687	1.6006	1.6291	1.6552	1.7025	1.7452	1.7848	1.8219	1.8570	1.8904	1.9223	1.9528	1.9822
	Sh				49.03	99.03	149.03	199.03	299.03	399.03	499.03	599.03	699.03	799.03	899.03	999.03	1099.03
250	v	0.01865	1.8432		2.0016	2.1504	2.2909	2.4262	2.6872	2.9410	3.1909	3.4382	3.6837	3.9278	4.1709	4.4131	4.6546
(400.97)	h	376.14	1201.1		1233.4	1263.5	1291.8	1319.0	1371.6	1423.4	1475.3	1527.6	1580.6	1634.4	1688.9	1744.2	1800.2
	s	0.5679	1.5264		1.5629	1.5951	1.6239	1.6502	1.6976	1.7405	1.7801	1.8173	1.8524	1.8858	1.9177	1.9482	1.9776
	Sh				45.56	95.56	145.56	195.56	295.56	395.56	495.56	595.56	695.56	795.56	895.56	995.56	1095.56
	v	0.01870	1.7742		1.9173	2.0619	2.1981	2.3289	2.5808	2.8256	3.0663	3.3044	3.5408	3.7758	4.0097	4.2427	4.4750
260	h	379.90	1201.5		1231.9	1262.4	1290.9	1318.2	1371.1	1423.0	1474.9	1527.3	1580.4	1634.2	1688.7	1744.0	1800.1
(404.44)	s	0.5722	1.5230		1.5573	1.5899	1.6189	1.6453	1.6930	1.7359	1.7756	1.8128	1.8480	1.8814	1.9133	1.9439	1.9732
	Sh				42.20	92.20	142.20	192.20	292.20	392.20	492.20	592.20	692.20	792.20	892.20	992.20	1092.20
270	v	0.01875	1.7101		1.8391	1.9799	2.1121	2.2388	2.4824	2.7186	2.9509	3.1806	3.4084	3.6349	3.8603	4.0849	4.3087
(407.80)	h	383.56	1201.9		1230.4	1261.2	1290.0	1317.5	1370.5	1422.6	1474.6	1527.1	1580.1	1634.0	1688.5	1743.9	1800.0
	s	0.5764	1.5197		1.5518	1.5848	1.6140	1.6406	1.6885	1.7315	1.7713	1.8085	1.8437	1.8771	1.9090	1.9369	1.9690
	Sh				38.93	88.93	138.93	188.93	288.93	388.93	488.93	588.93	688.93	788.93	888.93	988.93	1088.93
280	v	0.01880	1.6505		1.7665	1.9037	2.0322	2.1551	2.3909	2.6194	2.8437	3.0655	3.2855	3.5042	3.7217	3.9384	4.1543
(411.07)	h	387.12	1202.3		1228.8	1260.0	1289.1	1316.8	1370.0	1422.1	1474.2	1526.8	1579.9	1633.8	1688.4	1743.7	1799.8
	s	0.5805	1.5166		1.5464	1.5798	1.6093	1.6361	1.6841	1.7273	1.7671	1.8043	1.8395	1.8730	1.9050	1.9356	1.9649
	Sh				35.75	85.75	135.75	185.75	285.75	385.75	485.75	585.75	685.75	785.75	885.75	985.75	1085.75
290	v	0.01885	1.5948		1.6988	1.8327	1.9578	2.0772	2.3058	2.5269	2.7440	2.9585	3.1711	3.3824	3.5926	3.8019	4.0106
(414.25)	h	390.60	1202.6		122703	1258.9	1288.1	1316.0	1369.5	1421.7	1473.9	1526.5	1579.6	1633.5	1688.2	1743.6	1799.7
	s	0.5844	1.5135		1.5412	1.5750	1.6048	1.6317	1.6799	1.7232	1.7630	1.8003	1.8356	1.8690	1.9010	1.9316	1.9610
	Sh				32.65	82.65	132.65	182.65	282.62	382.65	482.65	582.65	682.65	782.65	882.65	982.65	1082.65
300	v	0.01889	1.5427		1.6356	1.7665	1.8883	2.0044	2.2263	2.4407	2.6509	2.8585	3.0643	3.2688	3.4721	3.6746	3.8764
(417.35)	h	393.99	1202.9		1125.7	1257.7	1287.2	1315.2	1368.9	1421.3	1473.6	1526.2	1579.4	1633.3	1688.0	1743.4	1799.6
	s	0.5882	1.5105		1.5361	1.5703	1.6003	1.6274	1.6758	1.7192	1.7591	1.7964	1.8317	1.8652	1.8972	1.9278	1.9572
	Sh				29.64	79.64	129.64	179.64	279.64	379.64	479.64	579.64	679.64	779.64	879.64	979.64	1079.64
310	v	0.01894	1.4939		1.5763	1.7044	1.8233	1.9363	2.1520	2.3600	2.5638	2.7650	2.9644	3.1625	3.3594	3.5555	3.7509
(420.36)	h	397.30	1203.2		1224.1	1256.5	1286.3	1314.5	1368.4	1420.9	1473.2	1525.9	1579.2	1633.1	1687.8	1743.3	1799.4
	s	0.5920	1.5076		1.5311	1.5657	1.5960	1.6233	1.6719	1.7153	1.7553	1.7927	1.8280	1.8615	1.8935	1.9241	1.9536
	Sh				26.69	76.69	126.69	176.69	276.69	376.69	476.69	576.69	676.69	776.69	876.69	976.69	1076.69
320	v	0.01899	1.4480		1.5207	1.6462	1.7623	1.8725	2.0823	2.2843	2.4821	2.6774	2.8708	3.0628	3.2538	3.4438	3.6332
(423.31)	h	400.53	1203.4		1222.5	1255.2	1285.3	1313.7	1367.8	1420.5	1472.9	1525.6	1579.9	1632.9	1687.6	1743.1	1799.3
	s	0.5956	1.5048		1.5261	1.5612	1.5918	1.6192	1.6680	1.7116	1.7516	1.7890	1.8243	1.8579	1.8899	1.9206	1.9500
	Sh				23.82	73.82	123.82	173.82	273.82	373.82	473.82	573.82	673.82	773.82	873.82	973.82	1073.82
330	v	0.01903	1.4048		1.4684	1.5915	1.7050	1.8125	2.0168	2.2132	2.4054	25950	2.7828	2.9692	3.1545	3.3389	3.5227
(426.18)	h	403.70	1203.8		1220.9	1254.0	1284.4	1313.0	1367.3	1420.0	1472.5	1525.3	1578.7	1632.7	1687.5	1742.9	1799.2
	s	0.5991	1.5021		1.5213	1.5568	1.5876	1.6153	1.6643	1.7079	1.7480	1.7855	1.8208	1.8544	1.8864	1.9171	1.9466
	Sh				21.02	71.01	121.01	171.01	271.01	371.01	471.01	571.01	671.01	771.01	871.01	971.01	1071.01
340	v	0.01908	1.3640		1.4191	1.5399	1.6511	1.7561	1.9552	2.1463	2.3333	2.5175	2.7000	2.8811	3.0611	3.2402	3.4186
(428.99)	h	406.80	1203.8		1219.2	1252.8	1283.4	1312.2	1366.7	1419.6	1472.2	1525.0	1578.4	1632.5	1687.3	1742.8	1799.0
	s	0.6026	1.4994		1.5165	1.5525	1.5836	1.6114	1.6606	1.7044	1.7445	1.7820	1.8174	1.8510	1.8831	1.9138	1.9432
	Sh				18.27	68.27	118.27	168.27	268.27	368.27	468.27	568.27	668.27	768.28	868.27	968.27	1068.27
350	v	0.01912	1.3255		1.3725	1.4913	1.6002	1.7028	1.8970	2.0832	2.2652	2.4445	2.6219	2.7980	2.9760	3.1471	3.3205
(431.73)	h	409.83	1204.0		1217.5	1251.5	1282.4	1311.4	1366.2	1419.2	1471.8	1524.7	1578.2	1632.3	1687.1	1742.6	1798.9
	s	0.6059	1.4968		1.5119	1.5483	1.5797	1.6077	1.6571	1.7009	1.7411	1.7787	1.8141	1.8477	1.8798	1.9105	1.9400
	Sh				15.59	65.59	115.59	165.59	265.59	365.59	465.59	565.59	665.59	765.59	865.59	965.59	1065.59
360	v	0.01917	1.2891		1.3285	1.4454	1.5521	1.6525	1.8421	2.0237	2.2009	2.3755	2.5482	2.7196	2.8898	3.0592	3.2279
(434.41)	h	412.81	1204.1		1215.8	1250.3	1281.5	1310.6	1365.6	1418.7	1471.5	1524.4	1577.9	1632.1	1686.9	1742.5	1798.8
	s	0.6092	1.4943		1.5073	1.5441	1.5758	1.6040	1.6536	1.6976	1.7379	1.7754	1.8109	1.8445	1.8766	1.9073	1.9368
	Sh				10.39	60.39	110.39	160.39	260.39	360.39	460.39	560.39	660.39	760.39	860.39	960.39	1060.39
380	v	0.01925	1.2218		1.2472	1.3606	1.4635	1.5598	1.7410	1.9139	2.0825	2.2484	2.4124	2.5750	2.7366	2.8973	3.0572
(439.61)	h	418.59	1204.4		1212.4	1247.7	1279.5	1309.0	1364.5	1417.9	1470.8	1523.8	1577.4	1631.6	1686.5	1742.2	1798.5
	s	0.6156	1.4894		1.4982	1.5360	1.5683	1.5969	1.6470	1.6911	1.7315	1.7692	1.8047	1.8384	1.8705	1.9012	1.9307

Sh = superheat, F h = enthalpy, Btu per lb
v = specific volume, cu ft per lb s = entropy, Btu per R per lb

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature - Degrees Farenheit 450	500	550	600	650	700	800	900	1000	1100	1200	1300	1400	1500
	Sh			5.40	55.40	105.40	155.40	205.40	255.40	355.40	455.40	555.40	655.40	755.40	855.40	955.40	1055.40
400	v	0.01934	1.1610	1.1738	1.2841	1.3536	1.4763	1.5646	1.6499	1.8151	1.9759	2.1339	2.2901	2.4450	2.5987	2.7515	2.9037
(444.60)	h	424.17	1204.6	1208.8	1245.1	1277.5	1307.4	1335.9	1363.4	1417.0	1470.1	1523.3	1576.9	1631.2	1686.2	1741.9	1798.2
	s	0.6217	1.4847	1.4894	1.5282	1.5611	1.5901	1.6163	1.6406	1.6850	1.7255	1.7632	1.7988	1.8325	1.8647	1.8955	1.9250
	Sh			.60	50.60	100.60	150.60	200.60	250.60	350.60	450.60	550.60	650.60	750.60	850.60	950.60	1050.60
420	v	0.01942	1.1057	1.1071	1.2148	1.3113	1.4007	1.4856	1.5676	1.7258	1.8795	2.0304	2.1795	2.3273	2.4739	2.6196	2.7647
(449.40)	h	429.56	1204.7	1205.2	1242.4	1275.4	1305.8	1334.5	1362.3	1416.2	1469.4	1522.7	1576.4	1630.8	1685.8	1741.6	1798.0
	s	0.6276	1.4802	1.4808	1.5206	1.5542	1.5835	1.6100	1.6345	1.6791	1.7197	1.7575	1.7932	1.8269	1.8591	1.8899	1.9195
	Sh				45.97	95.97	145.97	195.97	245.97	345.97	445.97	545.97	645.97	745.97	845.97	945.97	1045.97
440	v	0.01950	1.0554		1.1517	1.2454	1.3319	1.4138	1.4926	1.6445	1.7918	1.9363	2.0790	2.2203	2.3605	2.4998	2.6384
(454.03)	h	434.77	1204.8		1239.7	1273.4	1304.2	1333.2	1361.1	1415.3	1468.7	1522.1	1575.9	1630.4	1685.5	1741.2	1797.7
	s	0.6332	1.4759		1.5132	1.5474	1.5772	1.6040	1.6286	1.6743	1.7142	1.7521	1.7878	1.8216	1.8538	1.8847	1.9146
	Sh				41.50	91.50	141.50	191.50	241.50	341.50	441.50	541.50	641.50	741.50	841.50	941.50	1041.50
460	v	0.01959	1.0092		1.0939	1.1852	1.2691	1.3482	1.4242	1.5703	1.7117	1.8504	1.9872	2.1226	2.2569	2.3903	2.5230
(458.50)	h	439.83	1204.8		1236.9	1271.3	1302.5	1331.8	1360.0	1414.4	1468.0	1521.5	1575.4	1629.9	1685.1	1740.9	1797.4
	s	0.6387	1.4718		1.5060	1.5409	1.5711	1.5982	1.6230	1.6680	1.7089	1.7469	1.7826	1.8165	1.8488	1.8797	1.9093
	Sh				37.18	87.18	137.18	187.18	237.18	337.18	437.18	537.18	637.18	737.18	837.18	937.18	1037.18
480	v	0.01967	0.9668		1.0409	1.1300	1.2115	1.2881	1.3615	1.5023	1.6384	1.7716	1.9030	2.0330	2.1619	2.2900	2.4173
(462.82)	h	444.75	1204.8		1234.1	1269.1	1300.8	1330.5	1358.8	1413.6	1467.3	1520.9	1574.9	1629.5	1684.7	1740.6	1797.2
	s	0.6439	1.4677		1.4990	1.5346	1.5652	1.5925	1.6176	1.6628	1.7038	1.7419	1.7777	1.8116	1.8439	1.8748	1.9045
	Sh				32.99	82.99	132.99	182.99	232.99	332.99	432.99	532.99	632.99	732.99	832.99	932.99	1032.99
500	v	0.01975	0.9276		0.9919	1.0791	1.1584	1.2327	1.3037	1.4397	1.5708	1.6992	1.8256	1.9507	2.0746	2.1977	2.3200
(467.01)	h	449.52	1204.7		1231.2	1267.0	1299.1	1329.1	1257.7	1412.7	1466.6	1520.3	1574.4	1629.1	1684.4	1740.3	1796.9
	s	1.6490	1.4639		1.4921	1.5284	1.5595	1.5871	1.6123	1.6578	1.6990	1.7371	1.7730	1.8069	1.8393	1.8702	1.8998
	Sh				28.93	78.93	128.93	178.93	228.93	328.93	428.93	528.93	628.93	728.93	828.93	928.93	1028.93
520	v	0.01982	0.8914		1.9466	1.0321	1.1094	1.1816	1.2504	1.3819	1.5085	1.6323	1.7542	1.8746	1.9940	2.1125	2.2302
(471.07)	h	454.18	1204.5		1228.3	1264.8	1297.4	1327.7	1356.5	1411.8	1465.9	1519.7	1573.9	1628.7	1684.0	1740.0	1796.7
	s	0.6540	1.4601		1.4853	1.5223	1.5539	1.5818	1.6072	1.6530	1.6943	1.7325	1.7684	1.8024	1.8348	1.8657	1.8954
	Sh				24.99	74.99	124.99	174.99	224.99	324.99	424.99	524.99	624.99	724.99	824.99	924.99	1024.99
540	v	0.01990	0.8577		0.9045	0.9884	1.0640	1.1342	1.2010	1.3284	1.4508	1.5704	1.6880	1.8042	1.9193	2.0336	2.1471
(475.01)	h	458.71	1204.4		1225.3	1262.5	1295.7	1326.3	1355.3	1410.9	1465.1	1519.1	1573.4	1628.2	1683.6	1739.7	1796.4
	s	0.6587	1.4565		1.4786	1.5164	1.5485	1.5767	1.6023	1.6483	1.6897	1.7280	1.7640	1.7981	1.8305	1.8615	1.8911
	Sh				21.16	71.16	121.16	171.16	221.16	321.16	421.16	521.16	621.16	721.16	821.16	921.16	1021.16
560	v	0.01990	0.8264		1.8653	0.9479	1.0217	1.0902	1.1552	1.2787	1.3972	1.5129	1.6266	1.7388	1.8500	1.9603	2.0699
(478.84)	h	458.71	1204.2		1222.2	1260.3	1293.9	1324.9	1354.2	1410.0	1464.4	1518.6	1572.9	1627.8	1683.3	1739.4	1796.1
	s	0.6587	1.4529		1.4720	1.5106	1.5431	1.5717	1.5975	1.6438	1.6853	1.7237	1.7598	1.7939	1.8263	1.8573	1.8870
	Sh				17.43	67.43	117.43	167.43	217.43	317.43	417.43	517.43	617.43	717.43	817.43	917.43	1017.43
580	v	0.02006	0.7971		0.8287	0.9100	0.9824	1.0492	1.1125	1.2324	1.3473	1.4593	1.5693	1.6780	1.7855	1.8921	1.9980
(482.57)	h	467.47	1203.9		1219.1	1258.0	1292.1	1323.4	1353.0	1409.2	1463.7	1518.0	1572.4	1627.4	1682.9	1739.1	1795.9
	s	0.6679	1.4495		1.4654	1.5049	1.5380	1.5668	1.5929	1.6394	1.6811	1.7196	1.7556	1.7898	1.8223	1.8533	1.8831
	Sh				13.80	63.80	113.80	163.80	213.80	313.80	413.80	513.80	613.80	713.80	813.80	913.80	1013.80
600	v	0.02013	0.7697		0.7944	0.8746	0.9456	1.0109	1.0726	1.1892	1.3008	1.4093	1.5160	1.6211	1.7252	1.8284	1.9309
(486.20)	h	471.70	1203.7		1215.9	1255.6	1290.3	1322.0	1351.8	1408.3	1463.0	1517.4	1571.9	1627.0	1682.6	1738.8	1795.6
	s	0.6723	1.4461		1.4590	1.4993	1.5329	1.5621	1.5884	1.6351	1.6769	1.7155	1.7517	1.7859	1.8184	1.8494	1.8792
	Sh				5.11	55.11	105.11	155.11	205.11	305.11	405.11	505.11	605.11	705.11	805.11	905.11	1005.11
650	v	0.02032	0.7084		0.7173	0.7954	0.8634	0.9254	0.9835	1.0929	1.1969	1.2979	1.3969	1.4944	1.5909	1.6864	1.7813
(494.89)	h	481.89	1202.8		1207.6	1249.6	1285.7	1318.3	1348.7	1406.0	1461.2	1515.9	1570.7	1625.9	1681.6	1738.0	1794.9
	s	1.6828	1.4381		1.4430	1.4858	1.5207	1.5507	1.5775	1.6249	1.6671	1.7059	1.7422	1.7765	1.8092	1.8403	1.8701
	Sh					46.92	96.92	146.92	196.92	296.92	396.92	496.92	596.92	696.92	796.92	896.92	996.92
700	v	0.02050	0.6556			0.7271	0.7928	0.8520	0.9072	1.0102	1.1078	1.2023	1.2948	1.3858	1.4757	1.5647	1.6530
(503.08)	h	491.60	1201.8			1243.4	1281.0	1314.6	1345.6	1403.7	1459.4	1514.4	1569.4	1624.8	1680.7	1737.2	1794.3
	s	0.6928	1.4304			1.4726	1.5090	1.5399	1.5673	1.6154	1.6580	1.6970	1.7335	1.7679	1.8006	1.8318	1.8617
	Sh					39.16	89.16	139.16	189.16	189.16	389.16	489.16	589.16	689.16	789.16	889.16	989.16
750	v	0.02069	0.6095			0.6676	0.7313	0.7882	0.8409	0.9386	1.0306	1.1195	1.2063	1.2916	1.3759	1.4592	1.5419
(510.84)	h	500.89	1200.7			1236.9	1276.1	1310.7	1342.5	1401.5	1457.6	1512.9	1568.2	1623.8	1679.8	1736.4	1793.6
	s	0.7022	1.4232			1.4598	1.4977	1.5296	1.5577	1.6065	1.6494	1.6886	1.7252	1.7598	1.7926	1.8239	1.8538
	Sh					31.79	81.79	131.79	181.79	281.79	381.79	481.79	581.79	681.79	781.79	881.79	981.79
800	v	0.02087	0.5690			0.6151	0.6774	0.7323	0.7828	0.8759	0.9631	1.0470	1.1289	1.2093	1.2885	1.3669	1.4446
(518.21)	h	509.81	1199.4			1230.1	1271.1	1306.8	1339.3	1399.1	1455.8	1511.4	1566.9	1622.7	1678.9	1735.7	1792.9
	s	0.7111	1.4163			1.4472	1.4869	1.5198	1.5484	1.5980	1.6413	1.6807	1.7175	1.7522	1.7851	1.8164	1.8464
	Sh					24.76	74.76	124.76	174.76	274.76	374.76	474.76	574.76	674.76	774.76	874.76	974.76
850	v	0.02105	0.5330			0.5683	0.6296	0.6829	0.7315	0.8205	0.9034	0.9830	1.0606	1.1366	1.2115	1.2855	1.3588
(525.24)	h	518.40	1198.0			1223.0	1265.9	1302.8	1336.0	1396.8	1454.0	1510.0	1565.7	1621.6	1678.0	1734.9	1792.3
	s	0.7197	1.4096			1.4347	1.4763	1.5102	1.5396	1.5899	1.6336	1.6733	1.7102	1.7450	1.7780	1.8094	1.8395
	Sh					18.05	68.05	118.05	168.5	268.05	368.05	468.05	568.05	668.05	768.05	868.05	968.05
900	v	0.02123	0.5009			0.5263	0.5869	0.6388	0.6858	0.7713	0.8504	0.9262	0.9998	1.0720	1.1430	1.2161	1.2825
(531.95)	h	526.70	1196.4			1215.5	1260.6	1298.6	1332.7	1394.4	1452.2	1508.5	1564.4	1620.6	1677.1	1734.1	1791.6
	s	0.7279	1.4032			1.4223	1.4659	1.5010	1.5311	1.5822	1.6263	1.6662	1.7033	1.7382	1.7713	1.8028	1.8329

Sh = superheat, F — h = enthalpy, Btu per lb

v = specific volume, cu ft per lb — s = entropy, Btu per R per lb

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500
	Sh			11.61	61.61	111.61	161.61	211.61	261.61	311.60	361.61	461.61	561.61	661.61	761.61	861.61	961.61
950	v	0.02141	0.4721	0.4883	0.5485	0.5993	0.6449	0.6871	0.7272	0.7656	0.8030	0.8753	0.9455	1.0142	1.0817	1.1484	1.2143
(538.39)	h	534.74	1194.7	1207.6	1255.1	1294.4	1329.3	1361.5	1392.0	1421.5	1450.3	1507.0	1563.2	1619.5	1676.2	1733.3	1791.0
	s	0.7358	1.3970	1.4098	1.4557	1.4921	1.5228	1.5500	1.5748	1.5977	1.6193	1.6595	1.6967	1.7317	1.7649	1.7965	1.8267
	Sh			5.42	55.42	105.42	155.42	205.42	255.42	305.42	355.42	455.42	555.42	655.42	755.42	855.42	955.42
1000	v	0.02159	0.4460	0.4535	0.5137	0.5636	0.6080	0.6489	0.6875	0.7245	0.7603	0.8295	0.8966	0.9622	1.0266	1.0901	1.1529
(544.58)	h	542.55	1192.9	1199.3	1249.3	1290.1	1325.9	1358.7	1389.6	1419.4	1448.5	1505.4	1561.9	1618.4	1675.3	1732.5	1790.3
	s	0.7334	1.3910	1.3973	1.4457	1.4833	1.5149	1.5426	1.5677	1.5908	1.6126	1.6530	1.6905	1.7256	1.7589	1.7905	1.8207
	Sh				49.47	99.47	149.47	199.47	129.47	299.47	349.47	449.47	549.47	649.47	749.47	849.47	949.47
1050	v	0.02177	0.4222		0.4821	0.5312	0.5745	0.6142	0.6515	0.6872	0.7216	0.7881	0.8524	0.9151	0.9767	1.0373	1.0973
(550.53)	h	550.15	1191.0		1243.4	1285.7	1322.4	1355.8	1387.2	1417.3	1446.6	1603.9	1560.7	1617.4	1674.4	1731.8	1789.6
	s	0.7507	1.3851		1.4358	1.4748	1.5072	1.5354	15608	1.5842	1.6062	1.6469	1.6845	1.7197	1.7531	1.7848	1.8151
	Sh				43.72	93.72	143.72	193.72	243.72	293.72	343.71	443.72	543.72	643.72	743.72	843.72	943.72
1100	v	0.02195	0.4006		0.4531	0.5017	0.5440	0.5826	0.6188	0.6533	0.6865	0.7505	0.8121	0.8723	0.9313	0.9894	1.0468
(556.28)	h	557.55	1189.1		1237.3	1281.2	1318.8	1352.9	1384.70	1415.2	1444.7	1502.4	1559.4	1616.3	1673.5	1731.0	1789.0
	s	0.7578	1.3794		1.4259	1.4664	1.4996	1.5284	1.5542	1.5779	1.6000	1.6410	1.6787	1.7141	1.7475	1.7793	1.8097
	Sh				39.18	89.18	139.18	189.18	239.18	289.18	339.18	439.18	539.18	639.18	739.18	839.18	939.18
1150	v	0.02214	0.3807		0.4263	0.4746	0.5162	0.5538	0.5889	0.6223	0.6544	0.7161	0.7754	0.8332	0.8899	0.9456	1.0007
(561.82)	h	564.78	1187.0		1230.9	1276.6	1315.2	1349.9	1382.2	1413.0	1442.8	1500.9	1558.1	1615.2	1672.6	1730.2	1788.3
	s	0.7647	1.3738		1.4160	1.4582	1.4923	1.5216	1.5478	1.5717	1.5941	1.6353	1.6732	1.7087	1.7422	1.7741	1.8045
	Sh				32.81	82.81	132.81	182.81	232.81	282.81	332.81	432.81	532.81	632.81	732.81	832.81	932.81
1200	v	0.02232	0.3299		0.4016	0.4497	0.4905	0.5273	0.5615	0.5939	0.6250	0.6845	0.7418	0.7974	0.8519	0.9055	0.9584
(567.19)	h	571.85	1184.8		1224.2	1271.8	1311.5	1346.9	1379.7	1410.8	1440.9	1499.4	1556.9	1614.2	1671.6	1729.4	1787.6
	s	0.7714	1.683		1.4061	1.4501	1.4851	1.5150	1.5415	1.5658	1.5883	1.6298	1.6679	1.7035	1.7371	1.7691	1.7996
	Sh				22.58	72.58	122.58	172.58	222.58	272.58	322.58	422.58	522.58	622.58	722.58	822.58	922.58
1300	v	0.02269	0.3299		0.3570	0.4052	0.4451	0.4804	0.5129	0.5436	0.5729	0.6287	0.6822	0.7341	0.7847	0.8345	0.8836
(577.42)	h	585.58	1180.2		1209.9	1261.9	1303.9	1340.8	1374.6	1406.4	1437.1	1496.3	1554.3	1612.0	1669.8	1727.9	1786.3
	s	0.7843	1.3577		1.3860	1.4340	1.4711	1.5022	1.5296	1.5544	1.5773	1.6194	1.6578	1.6937	1.7275	1.7596	1.7902
	Sh				12.93	62.93	112.93	162.93	212.93	262.93	312.93	412.93	512.93	612.93	712.93	812.93	912.93
1400	v	0.02307	0.3018		0.3176	0.3667	0.4059	0.4400	0.4712	0.5004	0.5282	0.5809	0.6311	0.6798	0.7272	0.7737	0.8195
(587.07)	h	598.83	1175.3		1194.1	1251.4	1296.1	1334.5	1396.3	1402.0	1433.2	1493.2	1551.8	1609.9	1668.0	1726.3	1785.0
	s	0.7966	1.3474		1.3652	1.4181	1.4575	1.4900	1.5182	1.5436	1.5670	1.6096	1.6484	1.6845	1.7185	1.7508	1.7815
	Sh				3.80	53.80	103.80	153.80	203.80	253.80	303.80	403.80	503.80	603.80	703.80	803.80	903.80
1500	v	0.02346	0.2772		0.2820	0.3328	0.3717	0.4049	0.4350	0.4629	0.4894	0.5394	0.5869	0.6327	0.6773	0.7210	0.7639
(596.20)	h	611.68	1170.1		1176.3	1240.2	1287.9	1328.0	1364.0	1397.4	1429.2	1490.1	1549.2	1607.7	1666.2	1724.8	1783.7
	s	0.8085	1.3373		1.3431	1.4022	1.4443	1.4782	1.5073	1.5333	1.5572	1.6004	1.6395	1.6759	1.7101	1.7425	1.7734
	Sh					45.13	95.13	145.13	195.13	245.13	295.13	395.13	495.13	595.13	695.13	795.13	895.13
1600	v	0.02387	0.2555			0.3026	0.3415	0.3741	0.4032	0.4301	0.4555	0.5031	0.5482	0.5915	0.6336	0.6748	1.7153
(604.87)	h	624.20	1164.5			1228.3	1279.4	1321.4	1358.5	1392.8	1425.2	1486.9	1546.6	1605.6	1664.3	1723.2	1782.3
	s	0.8199	1.3274			1.3861	1.4312	1.4667	1.4968	1.5235	1.5478	15916	1.6312	1.6678	1.7022	1.7347	1.7657
	Sh					36.87	86.87	136.87	186.87	236.87	286.87	386.87	486.87	586.87	686.87	786.87	886.87
1700	v	0.02428	0.2361			0.2754	0.3147	0.3468	0.3751	0.4011	1.4255	0.4711	0.5140	0.5552	0.5951	0.6341	0.6724
(613.13)	h	636.45	1158.6			1215.3	1270.5	1314.5	1352.9	1388.1	1421.2	1483.8	1544.0	1603.4	1662.5	1721.7	1781.0
	s	0.8309	1.3176			1.3697	1.4183	1.4555	1.4867	1.5140	1.5388	1.5833	1.6232	1.6601	1.6947	1.7274	1.7585
	Sh					28.98	78.98	128.98	178.98	228.98	278.98	378.98	478.98	578.98	678.98	778.98	878.98
1800	v	0.02472	0.2186			0.2505	0.2906	0.3223	0.3500	0.3752	0.3988	0.4426	0.4836	0.5229	0.5609	0.5980	0.6343
(621.02)	h	648.49	1152.3			1201.2	1261.1	1307.4	1347.2	1383.3	1417.1	1480.6	1541.4	1601.2	1660.7	1720.1	1779.7
	s	0.8417	1.3079			1.3526	1.4054	1.4446	1.4768	1.5049	1.5302	1.5753	1.6156	1.6528	1.6876	1.7204	1.7516
	Sh					21.44	71.44	121.44	171.44	221.44	271.44	371.44	471.44	571.44	671.44	771.44	871.44
1900	v	0.02517	0.2028			0.2274	0.2687	0.3004	0.3275	0.3521	0.3749	0.4171	0.4565	0.4940	0.5303	0.5656	0.6002
(628.56)	h	660.36	1145.6			1185.7	1251.3	1300.2	1341.4	1378.4	1412.9	1477.4	1538.8	1599.1	1658.8	1718.6	1778.4
	s	0.8522	1.2981			1.3346	1.3925	1.4338	1.4672	1.4960	1.5219	1.5677	1.6084	1.6458	1.6808	1.7138	1.7451
	Sh					14.20	64.20	114.20	164.20	214.20	264.20	364.20	464.20	564.20	664.20	764.20	864.20
2000	v	0.02565	0.1883			0.2056	0.2488	0.2805	0.3072	0.3312	0.3534	0.3942	0.4320	0.4680	0.5027	0.5365	0.5695
(635.80)	h	672.11	1138.3			1168.3	1240.9	1292.6	1335.4	1373.5	1408.7	1474.1	1536.2	1596.9	1657.0	1717.0	1771.1
	s	0.8625	1.2881			1.3154	1.3794	1.4231	1.4578	1.4874	1.5138	1.5603	1.6014	1.6391	1.6743	1.7075	1.7389
	Sh					7.24	57.24	107.24	157.24	207.54	257.24	357.24	457.24	557.24	657.24	757.24	857.24
2100	v	0.02615	0.1750			0.1847	0.2304	0.2624	0.2888	0.3123	0.3339	0.3734	0.4099	0.4445	0.4778	0.5101	0.5418
(642.76)	h	683.79	1130.5			1148.5	1229.8	1284.9	1329.3	1368.4	1404.4	1470.9	1533.6	1594.7	1655.2	1715.4	1775.7
	s	0.8727	1.2780			1.2942	1.3661	1.4125	1.4486	1.4790	1.5060	1.5532	1.5948	1.6327	1.6681	1.7014	1.7330
	Sh					.55	50.55	100.55	150.55	200.55	250.55	350.55	450.55	550.55	650.55	750.55	850.55
2200	v	0.02669	0.1627			0.1636	0.2134	0.2458	0.2720	0.2950	0.3161	0.3545	0.3897	0.4231	0.4551	0.4862	0.5165
(649.45)	h	695.46	1122.2			1123.9	1216.0	1276.8	1323.1	1363.3	1400.0	1467.6	1530.9	1592.5	1653.3	1713.9	1774.4
	s	0.8828	1.2676			1.2691	1.3523	1.4020	1.4395	1.4708	1.4984	1.5463	1.5883	1.6266	1.6622	1.6956	1.7273
	Sh						44.11	94.11	144.11	194.11	244.11	344.11	444.11	544.11	644.11	744.11	844.11
2300	v	0.02727	0.1513				0.1975	0.2305	0.2566	0.2793	0.2999	0.3372	0.3714	0.4035	0.4344	0.4643	0.4935
(655.89)	h	707.18	1113.2				1205.3	1268.4	1316.7	1358.1	1395.7	1464.2	1528.3	1590.3	1651.5	1712.3	1773.1
	s	0.8929	1.2569				1.3381	1.3914	1.4305	1.4628	1.4910	1.5394	1.5821	1.6207	1.6565	1.6901	1.7219

Sh = superheat, F
v = specific volume, cu ft per lb
h = enthalpy, Btu per lb
s = entropy, Btu per R per lb

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 700	750	800	850	900	950	1000	1050	1100	1150	1200	1300	1400	1500
	Sh			37.89	87.89	137.89	187.89	237.89	287.89	337.89	387.89	437.89	487.89	537.89	637.89	737.89	837.89
2400	v	0.02790	0.1408	0.1824	0.2164	0.2424	0.2648	0.2850	0.3037	0.3214	0.3382	0.3545	0.3703	0.3856	0.4155	0.4443	0.4724
(662.11)	h	718.95	1103.7	1191.6	1259.7	1301.1	1352.8	1391.2	1426.9	1460.9	1493.7	1525.6	1557.0	1588.1	1649.6	1710.8	1771.8
	s	0.9031	1.2460	1.3232	1.3808	1.4217	1.4549	1.4837	1.5095	1.5332	1.5553	1.5761	1.5959	1.6149	1.6509	1.6847	1.7167
	Sh			31.89	81.89	131.89	181.89	231.89	281.89	331.89	381.89	431.89	481.89	531.89	631.89	731.89	831.89
2500	v	0.02859	0.1307	0.1681	0.2032	0.2293	0.2514	0.2712	0.2896	0.3068	0.3232	0.3390	0.3543	0.3692	0.3980	0.4529	0.4529
(668.11)	h	731.71	1093.3	1176.7	1250.6	1303.4	1347.4	1386.7	1423.1	1475.5	1490.7	1522.9	1554.6	1585.9	1647.8	1709.2	1770.4
	s	0.9139	1.2345	1.3076	1.3701	1.4129	1.4472	1.4766	1.5209	1.5269	1.5492	1.5703	1.5903	1.6094	1.6456	1.6796	1.7116
	Sh			26.09	76.09	126.09	176.09	226.09	276.09	326.09	376.09	426.09	476.09	526.09	626.09	726.09	826.09
2600	v	0.02938	0.1211	0.1544	0.1909	0.2171	0.2390	0.2585	0.2765	0.2933	0.3093	0.3247	0.3395	0.3540	0.3819	0.4088	0.4350
(673.91)	h	744.47	1082.0	1160.2	1241.1	1296.5	1341.9	1382.1	1419.2	1454.1	1487.7	1520.2	1552.2	1583.7	1646.0	1707.7	1769.1
	s	0.9247	1.2225	1.2908	1.3592	1.4042	1.4395	1.4696	1.4964	1.5208	1.5434	1.5646	1.5848	1.6040	1.6405	1.6746	1.7068
	Sh			20.47	65.04	120.47	170.47	220.47	270.47	320.47	370.47	420.47	470.47	520.47	620.47	720.47	820.47
2700	v	0.03029	0.1119	0.1411	0.1685	0.2058	0.2275	0.2468	0.2644	0.2809	0.2965	0.3114	0.3259	0.3399	0.3670	0.3931	0.4184
(679.53)	h	757.34	1069.7	1142.0	1220.6	1289.5	1336.3	1377.5	1415.2	1450.7	1484.6	1517.5	1549.8	1581.5	1644.1	1706.1	1767.8
	s	0.9356	1.2097	1.2727	1.3368	1.3954	1.4319	1.4628	1.4900	1.5148	1.5376	1.5591	1.5794	1.5988	1.6355	1.6697	1.7021
	Sh			15.04	65.04	115.04	165.04	215.04	265.04	315.04	365.04	415.04	465.04	515.04	615.04	715.04	815.04
2800	v	0.03134	0.1030	0.1278	0.1685	0.1952	0.2168	0.2358	0.2531	0.2693	0.2845	0.2991	0.3132	0.3268	0.3268	0.3785	0.4030
(684.96)	h	770.69	1055.8	1121.2	1220.6	1282.2	1330.7	1372.8	1411.2	1447.2	1481.6	1514.8	1547.3	1579.3	1642.2	1704.5	1766.5
	s	0.9468	1.1958	1.2527	1.3368	1.3867	1.4245	1.4561	1.4838	1.5089	1.5321	1.5537	1.5724	1.5938	1.6306	1.6651	1.6975
	Sh			9.87	59.78	109.78	159.78	209.78	259.78	309.78	359.78	409.78	459.78	509.78	609.78	709.78	809.78
2900	v	0.03262	0.0942	0.1138	0.1581	0.1853	0.2068	0.2256	0.2427	0.2585	0.2734	0.2877	0.3014	0.3147	0.3403	0.3649	0.3887
(690.22)	h	785.13	1039.8	1095.3	1209.6	1274.7	1324.9	1368.0	1407.2	1443.7	1478.5	1512.1	1544.9	1577.0	1640.4	1703.0	1765.2
	s	0.9588	1.1803	1.2283	1.3251	1.3780	1.4171	1.4494	1.4777	1.5032	1.5266	1.5485	1.5692	1.5889	1.6259	1.6605	1.6931
	Sh			4.67	54.67	104.67	154.67	204.67	254.67	304.67	354.67	404.67	454.67	504.67	604.64	704.67	804.67
3000	v	0.03428	0.0850	0.0982	0.1483	0.1759	0.1975	0.2161	0.2329	0.2484	0.2630	0.2770	0.2904	0.3033	0.3282	0.3522	0.3753
(695.33)	h	801.84	1020.3	1060.5	1197.9	1267.0	1319.0	1363.2	1403.1	1440.2	1475.4	1509.4	1542.4	1574.8	1638.5	1701.4	1763.8
	s	0.9728	1.1619	1.1966	1.3131	1.3692	1.4097	1.4429	1.4717	1.4976	1.5213	1.5434	1.5342	1.5341	1.6214	1.6561	1.6888
	Sh				49.72	99.72	149.72	199.72	249.72	299.72	349.72	399.72	449.72	499.72	599.72	699.72	799.72
3100	v	0.03681	0.0745		0.1389	0.1671	0.1887	0.2017	0.2237	0.2390	0.2533	0.2670	0.2800	0.2927	0.3170	0.3403	0.3628
(700.28)	h	823.97	993.3		1185.4	1259.1	1313.0	1358.4	1399.0	1436.7	1472.3	1506.6	1539.9	1572.6	1636.7	1699.8	1762.5
	s	0.9914	1.1373		1.3007	1.3604	1.4024	1.4364	1.4658	1.4920	1.5161	1.5384	1.5594	1.5794	1.6169	1.6518	1.6847
	Sh				44.92	94.92	144.92	194.92	244.92	294.92	344.92	394.92	444.92	494.92	594.92	694.92	794.92
3200	v	0.04472	0.0566		0.1300	0.1588	0.1804	0.1987	0.2151	0.2301	0.2442	0.2576	0.2704	0.2827	0.3065	0.3291	0.3510
(705.08)	h	875.54	931.6		1172.3	1250.9	1306.9	1353.4	1394.9	1433.1	1469.2	1503.8	1537.4	1570.3	1634.8	1698.3	1761.2
	s	1.0351	1.0832		1.2877	1.3515	1.3951	1.4300	1.4600	1.4866	1.5110	1.5335	1.5547	1.5749	1.6126	1.6477	1.6806
3300	v				0.1213	1.1510	0.1727	0.1908	0.2070	0.2218	0.2357	0.2488	0.2613	0.2734	0.2966	0.3187	0.3400
	h				1158.2	1242.5	1300.7	1348.4	1390.7	1429.5	1466.1	1501.0	1534.9	1568.1	1632.9	1696.7	1759.9
	s				1.2742	1.3425	1.3879	1.4237	1.4542	1.4813	1.5059	1.5287	1.5501	1.5704	1.6084	1.6436	1.6767
3400	v				0.1129	0.1435	0.1653	0.1834	0.1994	0.2140	0.2276	0.2405	0.2528	0.2646	0.2872	0.3088	0.3296
	h				1143.2	1233.7	1294.3	1343.4	1386.4	1425.9	1462.9	1498.3	1532.4	1565.8	1631.1	1695.1	1758.5
	s				1.2600	1.3334	1.3807	1.4174	1.4486	1.4761	1.5010	1.5240	1.5456	1.5660	1.6042	1.6396	1.6728
3500	v				0.1048	0.1364	0.1583	0.1764	0.1922	0.2066	0.2200	0.2326	0.2447	0.2563	0.2784	0.2995	0.3198
	h				1127.1	1224.6	1287.8	1338.2	1382.2	1422.2	1459.7	1495.5	1529.9	1563.6	1629.2	1693.6	1757.2
	s				1.2450	1.3242	1.3734	1.4112	1.4430	1.4709	1.4962	1.5194	1.5412	1.5618	1.6002	1.6358	1.6691
3600	v				0.0966	0.1296	0.1517	0.1697	0.1854	0.1996	0.2128	0.2252	0.2371	0.2485	0.2702	0.2908	0.3106
	h				1108.6	1215.3	1281.2	1333.0	1377.9	1418.6	1456.5	1492.6	1527.4	1561.3	1627.3	1692.0	1755.9
	s				1.2281	1.3148	1.3662	1.4050	1.4374	1.4658	1.4914	1.5149	1.5369	1.5576	1.5962	1.6320	1.6654
3800	v				0.0799	0.1169	0.1395	0.1574	0.1729	0.1868	0.1996	0.2116	0.2231	0.2340	0.2549	0.2746	0.2936
	h				1064.2	1195.5	1267.6	1322.4	1369.1	1411.2	1450.1	1487.0	1522.4	1556.8	1623.6	1688.9	1753.2
	s				1.1888	1.2955	1.3517	1.3928	1.4265	1.4558	1.4821	1.5061	1.5284	1.5495	1.5886	1.6247	1.6584
4000	v				0.0631	0.1052	0.1284	0.1463	0.1616	0.1752	0.1877	0.1994	0.2105	0.2210	0.2411	0.2601	0.2783
	h				1007.4	1174.3	1253.4	1311.6	1360.2	1403.6	1443.6	1481.3	1517.3	1552.2	1619.8	1685.7	1750.6
	s				1.1396	1.2754	1.3371	1.3807	1.4158	1.4461	1.4730	1.4976	1.503	1.5417	1.5812	1.6177	1.6516
4200	v				0.0498	0.0945	0.1183	0.1362	0.1513	0.1647	0.1769	0.1883	0.1991	0.2093	0.2287	0.2470	0.2645
	h				950.1	1151.6	1238.6	1300.4	1351.2	1396.0	1437.1	1475.5	1512.2	1547.6	1616.1	1682.6	1748.0
	s				1.0905	1.2544	1.3223	1.3686	1.4053	1.4366	1.4642	1.4893	1.5124	1.5341	1.5742	1.6109	1.6452
4400	v				0.0421	0.0846	0.1090	0.1270	0.1420	0.1552	0.1671	0.1782	0.1887	0.1986	0.2174	0.2351	0.2519
	h				909.5	1127.3	1223.3	1289.0	1342.0	1388.3	1430.4	1469.7	1507.1	1543.0	1612.3	1679.4	1745.3
	s				1.0556	1.2325	1.3073	1.3566	1.3949	1.4272	1.4556	1.4812	1.5048	1.5268	1.5673	1.6044	1.6389

Sh = superheat, F
v = specific volume, cu ft per lb
h = enthalpy, Btu per lb
s = entropy, Btu per R per lb”

Table 3: Superheated Steam — Continued

Abs Press. Lb/Sq In (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
4600	v			0.0380	0.0751	0.1005	0.1186	0.1336	0.1465	0.1582	0.1691	0.1792	0.1889	0.1982	0.2071	0.2242	0.2404
	h			883.8	1100.0	1207.3	1277.2	1332.6	1380.5	1423.7	1463.9	1501.9	1538.4	1573.8	1608.5	1676.3	1742.7
	s			1.0331	1.2084	1.2922	1.3446	1.3847	1.4181	1.4472	1.4734	1.4974	1.5197	1.5407	1.5607	1.5982	1.6330
4800	v			0.0355	0.0665	0.0927	0.1109	0.1257	0.1385	0.1500	0.1606	0.1706	0.1800	0.1890	0.1977	0.2142	0.2299
	h			866.9	1071.2	1190.7	1265.2	1323.1	1372.6	1417.0	1458.0	1496.7	1533.8	1569.7	1604.0	1673.1	1740.0
	s			1.0180	1.1835	1.2768	1.3327	1.3745	1.4090	1.4390	1.4657	1.4901	1.5128	1.5341	1.5543	1.5921	1.6272
5000	v			0.0338	0.0591	0.0855	0.1038	0.1185	0.1312	0.1425	0.1529	0.1626	0.1718	0.1806	0.1890	0.2050	0.2203
	h			854.9	1042.9	1173.6	1252.9	1313.5	1364.6	1410.2	1452.1	1491.5	1529.1	1565.5	1600.9	1670.0	1737.4
	s			1.0070	1.1593	1.2612	1.3207	1.3645	1.4001	1.4309	1.4582	1.4831	1.5061	1.5277	1.5481	1.5863	1.6216
5200	b			0.0326	0.0531	0.0789	0.0973	0.1119	0.1244	0.1356	0.1458	0.1553	0.1642	0.1728	0.1810	0.1966	0.2114
	h			845.8	1016.9	1156.0	1240.4	1303.7	1356.6	1403.4	1446.2	1486.3	1524.5	1561.3	1597.2	1666.8	1734.7
	s			1.9985	1.1370	1.2455	1.3088	1.3545	1.3914	1.4229	1.4509	1.4762	1.4995	1.5214	1.5420	1.5806	1.6161
5400	v			0.0317	0.0483	0.0728	0.0912	0.1058	0.1182	0.1292	0.1392	0.1485	0.1572	0.1656	0.1736	0.1888	0.2031
	h			838.5	994.3	1138.1	1227.7	1293.7	1348.4	1396.5	1440.3	1481.1	1519.8	1557.1	1593.4	1663.7	1732.1
	s			0.9916	1.1175	1.2296	1.2969	1.3446	1.3827	1.4151	1.4437	1.4694	1.4931	1.5153	1.5362	1.5750	1.6109
5600	v			0.0309	0.0447	0.0672	0.0856	0.1001	0.1124	0.1232	0.1331	0.1422	0.1508	0.1589	0.1667	0.1815	0.1954
	h			832.4	975.0	1119.9	1214.8	1283.7	1340.2	1389.6	1434.3	1475.9	1515.2	1552.9	1589.6	1660.5	1729.5
	s			0.9855	1.1008	1.2137	1.2850	1.3348	1.3742	1.4075	1.4366	1.4628	1.4869	1.5093	1.5304	1.5697	1.6058
5800	v			0.0303	0.0419	0.0622	0.0805	0.0949	0.1070	0.1177	0.1274	0.1363	0.1447	0.1527	0.1603	0.1747	0.1883
	h			827.3	958.8	1101.8	1201.8	1273.6	1332.0	1382.6	1428.3	1470.6	1510.5	1548.7	1585.8	1657.4	1726.8
	s			0.9803	1.0867	1.1981	1.2732	1.3250	1.3658	1.3999	1.4297	1.4564	1.4808	1.5035	1.5248	1.5644	1.6008
6000	v			0.0298	0.0397	0.0579	0.0757	0.0900	0.1020	0.1126	0.1221	0.1309	0.1391	0.1496	0.1544	0.1684	0.1817
	h			822.9	945.1	1084.6	1188.8	1263.4	1323.6	1375.7	1422.3	1465.4	1505.9	1544.6	1582.0	1654.2	1724.2
	s			0.9758	1.0746	1.1833	1.2615	1.3154	1.3574	1.3925	1.4229	1.4500	1.4748	1.4978	1.5194	1.5593	1.5960
6500	v			0.0287	0.0358	0.0495	0.0655	0.0793	0.0909	0.1012	0.1104	0.1188	0.1266	0.1340	0.1411	0.1544	0.1669
	h			813.9	919.5	1046.7	1156.3	1237.8	1302.7	1358.1	1407.3	1452.2	1494.2	1534.1	1572.5	1646.4	1717.6
	s			0.9661	1.0515	1.1506	1.2328	1.2917	1.3370	1.3743	1.4064	1.4347	1.4604	1.4841	1.5062	1.5471	1.5844
7000	v			0.0279	0.0334	0.0438	0.0573	0.0704	0.0816	0.0915	0.1004	0.1085	0.1160	0.1231	0.1298	0.1424	0.1542
	h			806.9	901.8	1016.5	1124.9	1212.6	1281.7	1340.5	1392.2	1439.1	1482.6	1523.7	1563.1	1638.6	1711.1
	s			0.9582	1.0350	1.1243	1.2055	1.2689	1.3171	1.3567	1.3904	1.4200	1.4466	1.4710	1.4938	1.5355	1.5735
7500	v			0.0272	0.0318	0.0399	0.0512	0.0631	0.0737	0.0833	0.918	0.996	0.1068	0.1136	0.1200	0.1321	0.1433
	h			801.3	889.0	992.90	1097.7	1188.3	1261.0	1322.9	1377.2	1426.0	1471.0	1513.3	1553.7	1630.8	1704.6
	s			0.9514	1.0224	1.1033	1.1818	1.2473	1.2980	1.3397	1.3751	1.4059	1.4335	1.4586	1.4819	1.5245	1.5632
8000	v			0.0267	0.0306	0.0371	0.0465	0.0571	0.0671	0.0762	0.0845	0.0920	0.0989	0.1054	0.1115	0.1230	0.1338
	h			796.6	879.1	974.4	1074.3	1165.4	1241.0	1305.5	1362.2	1413.0	1459.6	1503.1	1544.5	1623.1	1698.1
	s			0.9455	1.0122	0.0864	1.1613	1.2271	1.2798	1.3233	1.3603	1.3924	1.4208	1.4467	1.4705	1.5140	1.5533
8500	v			0.0262	0.0296	0.0350	0.0429	0.0522	0.0615	0.0701	0.0780	0.0853	0.0919	0.0982	0.1041	0.1151	0.1254
	h			792.7	871.2	959.5	1054.5	1144.0	1221.9	1288.5	1347.5	1400.2	1448.2	1492.9	1535.3	1615.4	1691.7
	s			0.9402	1.0037	1.0727	1.1437	1.2084	1.2627	1.3076	1.3460	1.3793	1.4087	1.4352	1.4597	1.5040	1.5439
9000	v			0.0258	0.0288	0.0335	0.0402	0.0483	0.0568	0.0649	0.0724	0.794	0.0858	0.0918	0.0975	0.1081	0.1179
	h			789.3	864.7	948.0	1037.6	1125.4	1204.1	1272.1	1333.0	1387.5	1437.1	1482.9	1526.3	1607.9	1685.3
	s			1.9354	1.9964	1.0613	1.1285	1.1918	1.2468	1.2926	1.3323	1.3667	1.3970	1.4243	1.4492	1.4944	1.5349
9500	v			0.0254	0.0282	0.0322	0.0380	0.0451	0.0528	0.0603	0.0675	0.0742	0.0804	0.0862	0.0917	0.1019	0.1113
	h			786.4	859.2	938.3	1023.4	1108.9	1187.7	1256.6	1318.9	1375.1	1426.1	1473.1	1517.3	1600.4	1679.0
	s			0.9310	0.9900	1.0516	1.1153	1.1771	1.2320	1.2785	1.3191	1.3546	1.3858	1.4137	1.4392	1.4851	1.5263
10000	v			0.0251	0.0276	0.0312	0.0362	0.0425	0.0495	0.0565	0.0633	0.0697	0.0757	0.0812	0.0865	0.0963	0.1054
	h			783.8	854.5	930.2	1011.3	1094.2	1172.0	1242.0	1305.3	1362.9	1415.3	1463.4	1508.6	1593.1	1672.8
	s			0.9270	0.9842	1.0432	1.1039	1.1638	1.2185	1.2652	1.3065	1.3429	1.3749	1.4035	1.4295	1.4763	1.5180
10500	v			0.0248	0.0271	0.0303	0.0347	0.0404	0.0467	0.0532	0.0595	0.0656	0.0714	0.0768	0.0818	0.0913	0.1001
	h			781.5	850.5	923.4	1001.0	1081.3	1158.9	1228.4	1292.4	1351.1	1404.7	1453.9	1500.0	1585.8	1666.7
	s			0.9232	0.9790	1.0358	1.0939	1.1519	1.2060	1.2529	1.2946	1.3371	1.3644	1.3937	1.4202	1.4677	1.5100

Sh = superheat, F
v = specific volume, cu ft per lb
h = enthalpy, Btu per lb
s = entropy, Btu per R per lb

Table 3: Superheated Steam — Continued

Abs Press. LbSq in (Sat. Temp)		Sat. Water	Sat. Steam	Temperature — Degrees Fahrenheit 750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
11000	v			0.0245	0.0267	0.0296	0.0335	0.0386	0.0443	0.0503	0.0562	0.0620	0.0676	0.0727	0.0776	0.0868	0.0952
	h			779.5	846.9	917.5	992.1	1069.9	1146.3	1215.9	1280.2	1339.7	1394.4	1444.6	1491.5	1578.7	1660.6
	s			0.9196	0.9742	1.0292	1.0851	1.1412	1.1945	1.2414	1.2833	1.3209	1.3544	1.3842	1.4112	1.4595	1.5023
11500	v			0.0243	0.0263	0.0290	0.0325	0.0370	0.0423	0.0478	0.534	0.0588	0.0641	0.0691	0.0739	0.0827	0.0909
	h			777.7	843.8	912.4	984.5	1059.8	1134.9	1204.3	1268.7	1328.8	1384.4	1435.5	1483.2	1571.8	1654.7
	s			0.9163	0.9698	1.0232	1.0772	1.1316	1.1840	1.2308	1.2727	1.3107	1.3446	1.3750	1.4025	1.4515	1.4949
12000	v			0.0241	0.0260	0.0284	0.0317	0.0357	0.0405	0.0456	0.0508	0.0560	0.0610	0.0659	0.0704	0.0790	0.0869
	h			776.1	841.0	907.9	977.8	1050.9	1124.5	1193.7	1258.0	1318.5	1374.7	1426.6	1475.1	1564.9	1648.8
	s			0.9131	0.9657	1.0177	1.0701	1.1229	1.1742	1.2209	1.2627	1.3010	1.3353	1.3662	1.3941	1.4438	1.4877
12500	v			0.0238	0.0256	0.0279	0.0309	0.0346	0.0390	0.0437	0.0486	0.0535	0.0583	0.0629	0.0673	0.0756	0.0832
	h			774.7	838.6	903.9	971.9	1043.1	1115.2	1184.1	1247.9	1308.8	1365.4	1418.0	1467.2	1558.2	1643.1
	s			0.9101	0.9618	1.0127	1.0637	1.1151	1.1653	1.2117	1.2534	1.2918	1.3264	1.3576	1.3860	1.4363	1.4808
13000	v			0.0236	0.0253	0.0275	0.0302	0.0336	0.0376	0.0420	0.0466	0.0512	0.0558	0.0602	0.0645	0.0725	0.0799
	h			773.5	836.3	900.4	966.8	1036.2	1106.7	1174.8	1238.5	1299.6	1356.5	1409.6	1459.4	1551.6	1637.4
	s			0.9073	0.9582	1.0080	1.0578	1.1079	1.1571	1.2030	1.2445	1.2831	1.3179	1.3494	1.3781	1.4291	1.4741
13500	v			0.0235	0.0251	0.0271	0.0297	0.038	0.0364	0.0405	0.0448	0.0492	0.0535	0.0577	0.0619	0.0696	0.0768
	h			772.3	834.4	897.2	962.2	1030.0	1099.1	1166.3	1229.7	1291.0	1348.1	1401.5	1451.8	1545.2	1631.9
	s			0.9045	0.9548	1.0037	1.0524	1.1014	1.1495	1.1948	1.2361	1.2749	1.3098	1.3415	1.3705	1.4221	1.4675
14000	v			0.0233	0.0248	0.0267	0.0291	0.0320	0.0354	0.0392	0.0432	0.0474	0.0515	0.0534	0.0595	0.0670	0.0740
	h			771.3	832.6	894.3	958.0	1024.5	1092.3	1158.5	1221.4	1283.0	1340.2	1386.4	1444.4	1538.8	1626.5
	s			0.9019	0.9515	0.9996	1.0473	1.0953	1.1426	1.1872	1.2282	1.2671	1.3021	1.3339	1.3631	1.4153	1.4612
14500	v			0.0231	0.0246	0.0264	0.0287	0.0314	0.0345	0.0380	0.0418	0.0458	0.0496	0.0534	0.0573	0.0646	0.0714
	h			770.4	831.0	891.7	954.3	1019.6	1086.2	1151.4	1213.8	1275.4	1332.9	1386.4	1437.3	1532.6	1621.1
	s			0.8994	0.9484	0.9957	1.0426	1.0897	1.1362	1.1801	1.2208	1.2597	1.2949	1.3266	1.3560	1.4087	1.4551
15000	v			0.0230	0.0244	0.0261	0.0282	0.0308	0.0337	0.0369	0.0405	0.0443	0.0479	0.0516	0.0552	0.0624	0.0690
	h			769.6	829.5	889.3	950.9	1015.1	1080.6	1144.9	1206.8	1268.1	1326.0	1379.4	1430.3	1526.4	1615.9
	s			0.8970	0.9455	0.9920	1.0382	1.0846	1.1302	1.1735	1.2139	1.2525	1.2880	1.3197	1.3491	1.4022	1.4491
15500	v			0.228	0.0242	0.0258	0.0278	0.0302	0.0329	0.0360	0.0393	0.0429	0.0464	0.0499	0.0534	0.0603	0.0668
	h			768.9	828.2	887.2	947.8	1011.1	1075.7	1139.0	1200.3	1261.1	1319.6	1372.8	1423.6	1520.4	1610.8
	s			0.8946	0.9427	0.9556	1.0340	1.0797	1.1247	1.1674	1.2073	1.2457	1.2815	1.3131	1.3424	1.3959	1.4433

Sh = superheat, F
v = specific volume, cu ft per lb
h = enthalpy, Btu per lb
s = entropy, Btu per R per lb

Fluid Property Correlation Constants

This section of the Sizing & Selection Appendix 3 provides correlations for 468 chemical constants and covers a multitude of values. This permits easy valve sizing and other calculations that usually require data on physical properties.
Most columns are self-explanatory. The exceptions are the Antoine coefficients A, B, C and the specific gravity constants TB and GFB. These are defined by the equations:

$$P_V = e^{\left[A - \frac{B}{T + C}\right]}$$

$$G_f = GFB \left[\frac{2T_C - T}{2T_C - T_B}\right]$$

Where:

- A, B, C = Antoine coefficients
- GFB = Reference Specific Gravity
- P_V = Vapor Pressure, psia
- G_f = Specific Gravity
- T = Temperature, ^{O}Rankine
- T_C = Critical Temperature, ^{O}Rankine
- T_B = Reference Temperature, ^{O}Rankine

MOL WT = Molecular weight
TC = Critical temperature, ^{O}F
PC = Critical pressure, psia
A, B, C = Antoines coefficient
GFB = Reference specific gravity
TB = Reference temperature, ^{O}F
K= Specific heat ratio

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
1	AR	Argon	39.948	-188.56	707.07	11.2873	1260.90	-10.51	1.373	-298.0	1.67
2	BCL3	Boron Trichloride	117.169	353.60	561.54	-3.9457	0.00	0.00	1.350	51.2	****
3	BF3	Boron Trifluoride	67.805	9.44	723.24	-3.9457	0.00	0.00	1.350	51.2	****
4	BR2	Bromine	159.808	591.20	1499.40	11.8984	4648.14	-92.81	3.119	67.4	1.30
5	CLNO	Nitrosyl Chloride	65.459	332.00	1323.00	13.0048	4537.26	-42.23	1.420	9.8	1.23
6	CL2	Chlorine	70.906	290.60	1117.20	12.0153	3560.94	-48.62	1.563	29.6	1.33
7	CL3P	Phosphorus Trichloride	137.333	553.40	0.00	-3.9457	0.00	0.00	1.574	69.2	****
8	CL4SI	Silicon Tetrachloride	169.898	452.60	543.90	11.8562	4741.38	-77.67	1.480	67.4	****
9	D2	Deuterium	4.032	-390.88	241.08	9.3497	284.04	0.00	0.165	-419.1	1.40
10	D20	Deuterium Oxide	20.031	699.20	3142.86	-3.9457	0.00	0.00	1.105	67.4	****
11	F2	Fluorine	37.997	-200.26	757.05	11.7243	1285.38	-10.80	1.510	-307.0	1.36
12	F3N	Nitrogen Trifluoride	71.002	-38.80	657.09	11.6650	2080.08	-27.67	1.537	-200.8	****
13	F4SI	Silicon Tetrafluoride	104.080	6.20	539.49	-3.9457	0.00	0.00	1.660	-139.6	****
14	F6S	Sulfur Hexafluoride	146.050	113.66	545.37	15.4328	4544.46	-20.09	1.830	-58.6	****
15	HBR	Hydrogen Bromide	80.912	193.76	1240.68	10.5230	2236.50	-86.15	2.160	-71.2	1.40
16	HCL	Hydrogen Chloride	36.461	124.28	1205.40	12.5583	3085.56	-26.01	1.193	-121.4	1.40
17	HF	Hydrogen Fluoride	20.006	369.80	940.80	13.7501	6127.92	27.11	0.967	67.4	1.40
18	HI	Hydrogen Iodide	127.912	303.20	1205.40	8.9692	1724.22	-153.11	2.803	-33.4	1.40
19	H2	Hydrogen	2.016	-400.24	188.16	9.6876	296.82	5.74	0.071	-424.0	1.40
20	H20	Water	18.015	705.14	3198.72	14.3579	6869.52	-83.03	0.998	67.4	1.33
21	H2S	Hydrogen Sulfide	34.080	211.76	1296.54	12.1583	3183.48	-46.91	0.993	-75.5	1.32
22	H3N	Ammonia	17.031	270.08	1636.11	13.0024	3838.50	-59.36	0.639	31.8	1.31
23	H4N2	Hydrazine	32.045	715.40	2131.50	14.0442	6979.68	-81.27	1.008	67.4	1.19
24	HE(4)	Helium-4	4.003	-450.66	32.93	8.3057	60.72	3.22	0.123	-452.3	****
25	I2	Iodine	253.808	1014.20	1690.50	12.2140	6676.56	-122.69	3.740	355.8	1.29
26	KR	Krypton	83.800	-83.08	798.21	11.3220	1725.66	-15.68	2.420	-244.0	****
27	NO	Nitric Oxide	30.006	-136.00	940.80	16.1857	2830.50	-8.78	1.280	-242.2	1.39
28	NO2	Nitrogen Dioxide	46.006	316.52	1470.00	16.5867	7454.16	6.57	1.447	67.2	1.29
29	N2	Nitrogen	28.013	-232.84	492.45	11.0085	1059.66	-11.88	0.804	-319.4	1.40
30	N20	Nitrous Oxide	44.013	97.28	1051.05	12.1814	2711.52	-46.78	1.226	-129.5	1.28
31	NE	Neon	20.183	-380.08	399.84	10.0642	324.72	-4.70	1.204	-411.4	****
32	O2	Oxygen	31.999	-181.72	732.06	11.4618	1322.10	-11.61	1.149	-298.0	1.40
33	02S	Sulfur Dioxide	64.063	315.44	1143.66	12.8223	4144.14	-64.75	1.455	13.4	1.27
34	O3	Ozone	47.998	9.80	808.50	11.7970	2289.78	-39.89	1.356	-169.7	1.27
35	03S	Sulfur Trioxide	80.058	423.80	1190.70	16.8946	7192.26	-65.99	1.780	112.4	****
36	XE	Xenon	131.300	61.46	846.72	11.3501	2347.02	-26.10	3.060	-163.0	****
37	CBRF3	Trifluorobromomethane	148.910	152.36	576.24	-3.9457	0.00	0.00	0.000	-460.0	****
38	CCLF3	Chlorotrifluoromethane	104.459	83.60	568.89	-3.9457	0.00	0.00	0.000	-460.0	1.14
39	CCL2F2	Dichlorodifluoromethane	120.914	233.00	598.29	-3.9457	0.00	0.00	1.750	-175.6	1.13
40	CCL2O	Phosgene	98.916	359.00	823.20	11.8108	3901.14	-77.67	1.381	67.4	1.17
41	CCL3F	Trichlorofluormethane	137.368	388.16	639.45	11.9059	4322.88	-65.34	0.000	-460.0	1.12
42	CCL4	Carbon Tetrachloride	153.823	541.52	661.50	11.9285	5054.58	-82.78	1.584	76.4	1.11
43	CF4	Carbon Tetrafluoride	88.005	-50.32	542.43	12.1086	2240.10	-23.51	0.000	-460.0	1.16
44	CO	Carbon Monoxide	28.010	-220.78	507.15	10.4229	954.36	-23.67	0.803	-314.2	1.40
45	COS	Carbonyl Sulfide	60.071	215.00	852.60	-3.9457	0.00	0.00	1.274	-147.3	1.25
46	CO2	Carbon Dioxide	44.010	87.56	1070.16	18.6441	5585.94	-0.29	0.777	67.4	1.29
47	CS2	Carbon Disulfide	76.131	533.60	1146.60	12.0387	4843.44	-56.92	1.293	31.4	1.22
48	CHCLF2	Chlorodifluormethane	86.469	204.56	721.77	11.6145	3068.64	-74.34	1.230	60.2	1.18
49	CHCL2F	Dichloromonofluoromet	102.923	352.88	749.70	-3.9457	0.00	0.00	1.380	47.6	1.16
50	CHCL3	Chloroform	119.378	505.52	793.80	12.0275	4854.06	-83.09	1.489	67.4	1.15
51	CHN	Hydrogen Cyanide	27.026	362.24	782.04	12.5681	4654.44	-66.87	0.688	67.4	1.30
52	CH2BR2	Dibromomethane	173.835	589.40	1043.70	-3.9457	0.00	0.00	2.500	67.4	****
53	CH2CL2	Dichloromethane	84.933	458.00	882.00	12.3572	4720.32	-75.06	1.317	76.4	1.20
54	CH20	Formaldehyde	30.026	274.40	955.50	12.5318	3967.38	-54.27	0.815	-4.6	1.32
55	CH202	Formic Acid	46.025	584.00	0.00	13.0425	6479.10	-46.96	1.226	58.4	1.23
56	CH3BR	Methyl Bromide	94.939	375.20	1249.50	12.0795	4089.06	-62.69	1.737	22.4	1.25
57	CH3CL	Methyl Chloride	50.488	289.34	968.73	12.1595	3740.22	-53.19	0.915	67.4	1.26
58	CH3F	Methyl Fluoride	34.033	112.04	852.60	12.3971	3067.92	-34.69	0.843	-76.6	1.29
59	CH3I	Methyl Iodide	141.939	490.40	955.50	12.1448	4751.10	-65.70	2.279	67.4	1.24
60	CH3NO2	Nitromethane	61.041	598.40	915.81	12.2736	5350.68	-115.47	1.138	67.4	1.17
61	CH4	Methane	16.043	-116.92	667.38	11.2786	1076.04	-12.89	0.425	-258.9	1.31
62	CH4O	Methanol	32.042	462.68	1174.53	14.6418	6527.70	-61.72	0.791	67.4	1.24
63	CH4S	Methyl Mercaptane	48.107	386.00	1049.58	12.2452	4208.94	-61.99	0.866	67.4	1.20
64	CH5N	Methyl Amine	31.058	314.00	1081.92	13.3165	4472.64	-59.26	0.703	7.3	1.21
65	CH6N2	Methyl Hydrazine	46.072	560.60	1165.71	11.1967	4175.64	-165.06	0.000	-460.0	****
66	C2CLF5	Chloropentafluoroethane	154.467	175.76	458.64	11.7886	3328.02	-55.58	0.000	-460.0	1.08

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
67	C2CL2F4	1,1-Dichloro-1,2,2,2-	170.922	293.48	479.22	-3.9457	0.00	0.00	1.455	76.4	1.08
68	C2CL2F4	1,2-Dichloro-1,1,2,2-	170.922	294.02	473.34	-3.9457	0.00	0.00	1.480	38.6	1.08
69	C2CL3F3	1,2,2-Trichloro-1,1,2	187.380	416.96	495.39	11.8967	4558.68	-82.21	1.580	60.2	1.07
70	C2CL4	Tetrachloroethylene	165.834	656.00	646.80	12.2185	5866.56	-93.87	1.620	67.4	1.10
71	C2CL4F2	1,1,2,2-Tetrachloro-1	203.831	531.80	0.00	-3.9457	0.00	0.00	1.645	76.4	****
72	C2F4	Perfluoroethene	100.016	91.52	571.83	11.9343	2834.28	-49.00	1.519	-105.4	1.12
73	C2F6	Perfluoroethene	138.012	67.04	0.00	11.6965	2723.22	-48.49	1.590	-109.0	1.09
74	C2N2	Cyanogen	52.035	260.00	867.30	-3.9457	0.00	0.00	0.000	-460.0	1.17
75	C2HCL3	Trichloroethylene	131.389	567.80	712.95	12.2370	5450.58	-77.67	1.462	67.4	1.12
76	C2HF302	Trifluoroacetic Acid	114.024	424.34	473.34	-3.9457	0.00	0.00	1.535	31.4	****
77	C2H2	Acetylene	26.038	94.94	890.82	12.4024	2946.78	-35.59	0.615	-119.8	1.23
78	C2H2F2	1,1-Difluoroethylene	64.035	85.04	646.80	-3.9457	0.00	0.00	0.000	-460.0	1.17
79	C2H20	Ketene	42.038	224.00	940.80	12.0740	3328.56	-63.27	0.000	-460.0	1.22
80	C2H3CL	Vinyl Chloride	62.499	313.46	812.91	11.0144	3246.84	77.67	0.969	6.2	1.19
81	C2H3CLF2	1-Chloro-1,1-Difluoro	100.496	278.36	598.29	-3.9457	0.00	0.00	1.100	85.4	1.11
82	C2H3CL0	Acetyl Chloride	78.498	454.40	852.60	11.8057	4405.14	-99.95	1.104	67.4	1.14
83	C2H3CL3	1,1,2-Trichloroethane	133.405	623.60	602.70	12.0924	5599.26	-101.09	1.441	67.4	1.11
84	C2H3F	Vinyl Fluoride	46.044	130.04	759.99	-3.9457	0.00	0.00	0.000	-460.0	****
85	C2H3F3	1,1,1-Trifluoroethane	84.041	163.16	545.37	11.9508	3266.82	-53.86	0.000	-460.0	1.12
86	C2H3N	Acetonitrile	41.053	526.40	701.19	12.3417	5301.72	-88.47	0.782	67.4	1.19
87	C2H3NO	Methyl Isocyanate	57.052	423.80	808.50	12.3801	4464.54	-101.36	0.958	67.4	1.15
88	C2H4	Ethylene	28.054	48.32	730.59	11.5911	2424.60	-32.67	0.577	-166.6	1.24
89	C2H4CL2	1,1-Dichloroethane	98.960	481.40	735.00	12.1385	4854.96	-81.05	1.168	76.4	1.12
90	C2H4CL2	1,2-Dichloroethane	98.960	549.80	779.10	12.2307	5268.78	-90.40	1.250	60.2	1.12
91	C2H4F2	1,1-Difluoroethane	66.051	235.88	652.68	12.2414	3771.54	-52.49	0.000	-460.0	1.14
92	C2H40	Acetaldehyde	44.054	369.80	808.50	12.3024	4437.18	-66.87	0.778	67.4	1.19
93	C2H40	Ethylene Oxide	44.054	384.20	1043.70	12.7943	4621.68	-52.22	0.899	31.4	1.21
94	C2H402	Acetic Acid	60.052	609.92	839.37	12.8623	6129.90	-101.41	1.049	67.4	1.14
95	C2H402	Methyl Formate	60.052	416.96	870.24	12.5647	4663.44	-76.68	0.974	67.4	1.15
96	C2H5BR	Ethyl Bromide	108.966	446.84	904.05	11.9881	4520.88	-74.59	1.451	76.4	1.15
97	C2H5CL	Ethyl Chloride	64.515	368.72	764.40	12.0343	4197.60	-65.66	0.896	67.4	1.16
98	C2H5F	Ethyl Fluoride	48.060	215.54	729.12	12.1229	3540.24	-48.60	0.000	-460.0	1.16
99	C2H5N	Ethylene Imine	43.069	-460.00	0.00	12.4770	4698.72	-113.67	0.833	76.4	1.19
100	C2H6	Ethane	30.070	89.72	708.54	11.7180	2720.52	-30.89	0.548	-130.6	1.19
101	C2H60	Dimethyl Ether	46.069	260.00	779.10	12.9010	4250.52	-30.78	0.667	67.4	1.15
102	C2H60	Ethanol	46.069	469.16	926.10	14.9662	6847.02	-75.02	0.789	67.4	1.15
103	C2H602	Ethylene Glycol	62.069	701.00	1117.20	16.3044	10839.78	-50.85	1.114	67.4	1.09
104	C2H6S	Ethyl Mercaptan	62.134	438.20	796.74	12.0620	4494.96	-75.19	0.839	67.4	1.13
105	C2H6S	Dimethyl Sulfide	62.130	445.40	802.62	12.0544	4520.70	-76.23	0.848	67.4	1.13
106	C2H7N	Ethyl Amine	45.085	360.80	815.85	13.0616	4713.66	-67.14	0.683	67.4	1.13
107	C2H7N	Dimethyl Amine	45.085	327.68	770.28	12.3196	4245.66	-63.27	0.656	67.4	1.14
108	C2H7N0	Monoethanolamine	61.084	645.20	646.80	13.8717	7178.94	-156.47	1.016	67.4	1.11
109	C2H8N2	Ethylenediamine	60.099	607.40	911.40	12.4625	5595.12	-129.87	0.896	67.4	1.09
110	C3H3N	Acrylonitrile	53.064	504.80	661.50	11.9796	5007.96	-92.07	0.806	67.4	1.15
111	C3H4	Propadiene	40.065	247.40	793.80	9.2106	1898.46	-138.74	0.658	-31.6	1.17
112	C3H4	Methyl Acetylene	40.065	264.32	815.85	11.6770	3331.08	-79.33	0.706	-58.6	1.16
113	C3H40	Acrolein	56.064	450.80	749.70	11.9600	4691.70	-81.27	0.839	67.4	1.15
114	C3H402	Acrylic Acid	72.064	647.00	823.20	12.6160	5974.38	-144.27	1.051	67.4	1.12
115	C3H402	Vinyl Formate	72.064	395.00	837.90	12.7074	4625.28	-113.67	0.963	67.4	1.13
116	C3H5CL	Allyl Chloride	76.526	465.20	690.90	12.0315	4557.42	-84.87	0.937	67.4	1.13
117	C3H5CL3	1,2,3-Trichloropropane	147.432	711.80	573.30	12.1789	6150.96	-124.47	1.389	67.4	1.08
118	C3H5N	Propionitrile	55.080	555.92	607.11	12.0114	5293.44	-99.27	0.782	67.4	1.13
119	C3H6	Cyclopropane	42.081	256.04	796.74	11.9142	3547.80	-47.97	0.563	58.4	1.18
120	C3H6	Propylene	42.081	197.00	670.32	11.7570	3253.50	-47.07	0.612	-58.6	1.15
121	C3H6CL2	1,2-Dichloropropane	112.987	578.60	646.80	12.0928	5373.00	-93.89	1.150	67.4	1.09
122	C3H60	Acetone	58.080	454.58	682.08	12.7056	5292.72	-64.67	0.790	67.4	1.13
123	C3H60	Allyl Alcohol	58.080	521.00	829.08	12.9609	5270.76	-153.27	0.855	58.4	1.12
124	C3H60	Propionaldehyde	58.080	432.80	690.90	12.2858	4786.20	-79.47	0.797	67.4	1.12
125	C3H60	Propylene Oxide	58.080	407.96	714.42	11.3770	3793.50	-116.77	0.829	67.4	1.13
126	C3H60	Vinyl Methyl Ether	58.080	324.80	690.90	10.5145	3564.36	-45.27	0.750	67.4	1.12
127	C3H602	Propionic Acid	74.080	641.60	779.10	13.4332	6702.12	-121.46	0.993	67.4	1.10
128	C3H602	Ethyl Formate	74.080	455.12	687.96	12.2154	4685.94	-97.47	0.927	60.2	1.10
129	C3H602	Methyl Acetate	74.080	452.24	680.61	12.1838	4683.42	-101.07	0.934	67.4	1.12
130	C3H7CL	Proply Chloride	78.542	445.40	664.44	12.0137	4646.52	-77.31	0.891	67.4	1.11
131	C3H7CL	Isophropyl Chloride	78.542	413.00	685.02	12.0927	4482.72	-77.67	0.862	67.4	1.11
132	C3H8	Propane	44.097	205.64	615.93	11.7803	3370.32	-45.29	0.582	44.2	1.13
133	C3H80	1-Propanol	60.096	506.06	749.70	13.5982	5699.34	-144.27	0.804	67.4	1.11
134	C3H80	Isopropyl Alcohol	60.096	454.94	690.90	14.7472	6552.36	-96.37	0.786	67.4	1.10
135	C3H80	Methyl Ethyl Ether	60.096	328.04	637.98	9.5978	2090.88	-202.32	0.700	67.4	1.10
136	C3H802	Methylal	76.096	434.60	0.00	11.8780	4348.62	-94.64	0.888	63.8	****

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
137	C3H802	1-,2-Propanediol	76.096	665.00	882.00	16.5867	10965.42	-40.43	1.036	67.4	1.09
138	C3H802	1-,3-Propanediol	76.096	724.40	867.30	13.3460	6999.84	-221.76	1.053	67.4	1.09
139	C3H803	Glycerol	92.095	846.80	970.20	13.2935	8076.60	-252.36	1.261	67.4	1.08
140	C3H8S	Methyl Ethyl Sulfide	76.157	499.40	617.40	12.0308	4901.22	-87.07	0.837	67.4	1.10
141	C3H9N	N-Propyl Amine	59.112	434.60	687.96	12.0500	4593.06	-88.47	0.717	67.4	1.10
142	C3H9N	Isopropyl Amine	59.112	396.80	735.00	12.4180	4648.14	-72.27	0.688	67.4	1.10
143	C3H9N	Trimethyl Amine	59.112	319.76	590.94	12.1042	4014.90	-70.47	0.633	67.4	1.10
144	C4H203	Maleic Anhydride	98.058	-460.00	0.00	12.3290	6778.08	0.00	0.000	-460.0	1.13
145	C4H4	Vinylacetylene	52.076	359.00	720.30	12.0643	3966.30	-77.67	0.710	31.4	1.13
146	C4H40	Furan	68.075	422.36	798.21	12.1155	4396.86	-81.74	0.938	67.4	1.15
147	C4H4S	Thiophene	84.136	582.92	826.14	12.0786	5164.20	-93.24	1.071	60.2	1.13
148	C4H5N	Allyl Cyanide	67.091	593.00	573.30	12.0562	5631.66	-104.67	0.835	67.4	1.11
149	C4H5N	Pyrrole	67.091	692.00	0.00	12.8509	6223.32	-112.91	0.967	69.2	****
150	C4H6	1-Butyne	54.092	374.66	683.55	12.1148	4088.52	-72.54	0.650	60.2	1.12
151	C4H6	2-Butyne	54.092	419.48	737.94	12.3414	4566.06	-67.21	0.691	67.4	1.12
152	C4H6	1,2-Butadiene	54.092	338.66	652.68	12.1582	4314.96	-55.58	0.652	67.4	1.12
153	C4H6	1,3-Butadiene	54.092	305.00	627.69	11.8270	3856.68	-61.74	0.621	67.4	1.12
154	C4H602	Vinyl Acetate	86.091	485.00	632.10	12.1546	4940.28	-101.07	0.932	67.4	1.10
155	C4H603	Acetic Anhydride	102.089	564.20	679.14	12.4525	5917.50	-135.20	1.087	67.4	1.09
156	C4H604	Dimethyl Oxalate	118.090	670.40	577.71	-3.9457	0.00	0.00	1.150	58.4	****
157	C4H604	Succinic Acid	118.090	-460.00	0.00	-3.9457	0.00	0.00	0.000	-460.0	-0.85
158	C4H7N	Butyronitrile	69.107	587.96	549.78	12.2635	5763.96	-101.09	0.792	67.4	1.10
159	C4H702	Methyl Acrylate	86.091	504.80	617.40	12.1631	5019.12	-106.47	0.956	67.4	1.10
160	C4H8	1-Butene	56.108	295.28	583.59	11.8107	3838.32	-59.67	0.595	67.4	1.11
161	C4H8	CIS-2-Butene	56.108	324.08	610.05	11.8714	3979.26	-65.07	0.621	67.4	1.12
162	C4H8	Trans-2-Butene	56.108	311.48	595.35	11.8720	3982.14	-59.67	0.604	67.4	1.11
163	C4H8	Cyclobutane	56.108	367.82	723.24	11.9797	4246.20	-57.20	0.694	67.4	1.14
164	C4H8	Isobutylene	56.108	292.22	580.65	11.8071	3826.26	-59.67	0.594	67.4	1.10
165	C4H80	N-Butyraldehyde	72.107	483.20	588.00	12.2211	5110.20	-90.27	0.802	67.4	1.09
166	C4H80	Isobutyraldehyde	72.107	463.40	602.70	12.0431	4818.42	-92.07	0.789	67.4	1.08
167	C4H80	Methyl Ethyl Ketone	72.107	504.08	602.70	12.6529	5670.72	-65.97	0.805	67.4	1.09
168	C4H80	Tetranhydrofuran	72.107	512.36	752.64	12.1612	4982.94	-84.42	0.889	67.4	1.09
169	C4H80	Vinyl Ethyl Ether	72.107	395.00	590.94	11.9454	4408.56	-79.47	0.793	67.4	1.09
170	C3H802	N-Butyric Acid	88.107	670.40	764.40	13.9783	7435.62	-126.99	0.958	67.4	1.08
171	C3H802	1, 4-Dioxane	88.107	596.60	755.58	12.1870	5340.24	-111.87	1.033	67.4	1.10
172	C3H802	Ethyl Acetate	88.107	481.76	555.66	12.2059	5022.90	-102.87	0.901	67.4	1.08
173	C3H802	Isobutyric Acid	88.107	636.20	588.00	12.8335	6093.72	-169.47	0.968	67.4	1.08
174	C3H802	Methyl Propionate	88.107	495.08	580.65	12.2236	5047.20	-106.06	0.915	67.4	1.09
175	C3H802	N-Propyl Formate	88.107	508.40	589.47	11.8214	4669.02	-125.44	0.911	60.2	****
176	C4H9CL	1-Chlorobutane	92.569	515.60	535.08	12.0293	5087.16	-88.29	0.886	67.4	1.09
177	C4H9CL	2-Chlorobutane	92.569	477.08	573.30	12.0450	4956.12	-84.87	0.873	67.4	1.08
178	C4H9CL	Tert-Butyl Chloride	92.569	452.60	573.30	11.8664	4620.78	-79.47	0.842	67.4	1.08
179	C4H9N	Pyrrolidine	71.123	563.48	814.38	11.9987	4890.60	-122.22	0.852	71.0	1.12
180	C4H9N0	Morpholine	87.122	652.40	793.80	12.2907	5708.34	-128.07	1.000	67.4	1.10
181	C4H10	N-Butane	58.124	305.36	551.25	11.7325	3878.82	-61.96	0.579	67.4	1.09
182	C4H10	Isobutane	58.124	274.58	529.20	11.5924	3658.86	-59.67	0.557	67.4	1.09
183	C4H100	N-Butanol	74.123	553.22	640.92	13.2703	5646.60	-169.97	0.810	67.4	1.08
184	C4H100	2-Butanol	74.123	504.80	608.58	13.2645	5446.80	-155.97	0.807	67.4	1.08
185	C4H100	Isobutanol	74.123	525.86	623.28	12.9255	5174.46	-180.54	0.802	67.4	1.08
186	C4H100	Tert-Butanol	74.123	451.16	576.24	12.9091	4784.76	-171.90	0.787	67.4	1.08
187	C4H100	Ethyl Ether	74.123	380.06	527.73	12.1371	4520.16	-75.51	0.713	67.4	1.08
188	C4H1002	1,2-Dimethoxyethane	90.123	504.80	561.54	12.0784	5165.46	-75.67	0.867	67.4	1.07
189	C4H1003	Diethylene Glycol	106.122	765.80	676.20	13.0869	7420.50	-220.50	1.116	67.4	1.05
190	C4H105	Diethyl Sulfide	90.184	542.60	574.77	12.0074	5213.16	-98.08	0.837	67.4	1.08
191	C4H10S2	Diethyl Disulfide	122.244	695.60	0.00	12.1150	6158.70	-115.54	0.998	67.4	1.06
192	C4H11N	N-Butyl Amine	73.139	483.20	602.70	12.6628	5422.86	-88.13	0.739	67.4	1.08
193	C4H11N	Isobutyl Amine	73.139	468.80	617.40	12.1962	4867.38	-101.07	0.000	-460.0	1.07
194	C4H11N	Diethyl Amine	73.139	433.88	538.02	12.1088	4671.00	-95.67	0.707	67.4	1.08
195	C5H5N	Pyridine	79.102	656.00	817.32	12.1453	5571.18	-110.07	0.983	67.4	1.06
196	C5H8	Cyclopentene	68.119	450.80	0.00	11.9899	4649.40	-71.46	0.773	67.4	1.13
197	C5H8	1,2-Pentadiene	68.119	445.40	590.94	11.9840	4579.74	-79.74	0.693	67.4	1.09
198	C5H8	1-Trans-3-Pentadiene	68.119	432.80	579.18	11.9725	4574.88	-74.57	0.676	67.4	1.08
199	C5H8	1,4-Pentadiene	68.119	400.40	549.78	11.7935	4219.20	-75.04	0.661	67.4	1.09
200	C5H8	1-Pentyne	68.119	428.12	588.00	12.0972	4528.08	-82.75	0.690	67.4	1.09
201	C5H8	2-Methyl-1,3-Butadiene	68.119	411.20	558.60	11.9091	4441.32	-71.35	0.681	67.4	1.09
202	C5H80	3-Methyl-1,2-Butadiene	68.119	432.80	596.82	12.0423	4575.24	-76.07	0.686	67.4	1.09
203	C5H802	Cyclopentanone	84.118	666.80	779.10	12.1440	5749.02	-119.07	0.950	67.4	1.09
204	C5H10	Ethyl Acrylate	100.118	533.60	543.90	12.1433	5354.82	-104.67	0.921	67.4	1.11
205	C5H10	Cyclopentane	70.135	460.88	654.15	11.9117	4659.12	-75.22	0.745	67.4	1.01
206	C5H10	1-Pentene	70.135	376.46	588.00	11.8189	4330.62	-71.33	0.640	67.4	1.11

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
207	C5H10	Cis-2-Pentene	70.135	396.80	529.20	11.8794	4426.20	-76.61	0.656	67.4	1.08
208	C5H10	Trans-2-Pentene	70.135	395.00	530.67	11.9554	4492.62	-72.32	0.649	67.4	1.09
209	C5H10	2-Methyl-1-Butene	70.135	377.00	499.80	11.8803	4367.52	-72.65	0.650	67.4	1.08
210	C5H10	2-Methyl-2-Butene	70.135	386.00	499.80	11.9781	4538.70	-72.56	0.662	67.4	1.08
211	C5H10	3-Methyl-1-Butene	70.135	350.00	510.09	11.7722	4200.48	-65.39	0.627	67.4	1.09
212	C5H100	Valeraldehyde	86.134	537.20	514.50	12.2166	5454.36	-104.67	0.810	67.4	1.07
213	C5H100	Methyl N-Propyl Keton	86.134	555.20	564.48	12.0574	5282.64	-112.05	0.806	67.4	1.07
214	C5H100	Methyl Isopropyl Keto	86.134	536.12	558.60	10.2322	3587.58	-185.76	0.803	67.4	1.07
215	C5H100	Diethyl Ketone	86.134	549.80	542.43	12.8681	6138.90	-72.27	0.814	67.4	1.07
216	C5H1002	N-Valeric Acid	102.134	711.80	558.60	13.6849	7365.78	-155.79	0.939	67.4	1.06
217	C5H1002	Isobutyl Formate	102.134	531.80	563.01	12.2835	5364.72	-115.47	0.885	67.4	1.07
218	C5H1002	N-Propyl Acetate	102.134	528.92	483.63	12.2834	5364.72	-115.47	0.887	67.4	1.07
219	C5H1002	Ethyl Propionate	102.134	522.80	488.04	12.2163	5283.18	-115.49	0.895	60.2	1.07
220	C5H1002	Methyl Butyrate	102.134	537.92	504.21	-3.9457	0.00	0.00	0.898	67.4	****
221	C5H1002	Methyl Isobutyrate	102.134	513.44	498.33	-3.9457	0.00	0.00	0.891	67.4	****
222	C5H11N	Piperidine	85.150	609.20	690.90	12.1547	5427.72	-110.07	0.862	67.4	1.09
223	C5H12	N-Pentane	72.151	385.28	489.51	11.8876	4458.60	-71.89	0.626	67.4	1.08
224	C5H12	2-Methyl Butane	72.151	368.72	490.98	11.6881	4227.48	-72.09	0.620	67.4	1.08
225	C5H12	1,1-Dimethyl Propane	72.151	320.84	464.52	11.2612	3661.38	-81.67	0.591	67.4	1.07
226	C5H120	1-Pentanol	88.150	594.80	558.60	12.5813	5448.24	-189.00	0.815	67.4	1.07
227	C5H120	2-Methyl-1-Butanol	88.150	567.80	558.60	12.3251	4953.78	-209.34	0.819	67.4	1.07
228	C5H120	3-Methyl-1-Butanol	88.150	583.10	558.60	12.7670	5447.52	-187.38	0.810	67.4	1.07
229	C5H120	2-Methyl-2-Butanol	88.150	521.00	573.30	11.0656	3578.40	-187.38	0.810	67.4	1.07
230	C5H120	2,2-Dimethyl-1-Propane	88.150	528.20	573.30	14.1879	6650.82	-117.00	0.783	128.6	1.06
231	C5H120	Ethyl Proply Ether	88.150	441.08	471.87	11.5082	4362.12	-112.10	0.733	67.4	****
232	C6F6	Perfluorobenzene	186.056	470.06	479.22	12.2483	5089.50	-103.79	0.000	-460.0	1.06
233	C6F12	Perfluorocyclohexane	300.047	362.96	352.80	9.9630	2473.20	-246.24	0.000	-460.0	****
234	C6F14	Perfluoro-n-hexane	338.044	353.06	276.36	11.8850	4479.30	-107.51	0.000	-460.0	****
235	C6H4CL2	0-Dichlorobenzene	147.004	795.14	595.35	12.3342	6836.79	-104.71	1.306	67.4	1.08
236	C6H4CL2	M-Dichlorobenzene	147.004	771.20	558.60	12.8716	7387.38	-77.67	1.288	67.4	1.08
237	C6H4CL2	P-Dichlorobenzene	147.004	773.00	573.30	12.1678	6528.24	-116.35	1.248	130.4	1.08
238	C6H5BR	Bromobenzene	157.010	746.00	655.62	11.8515	5963.40	-121.88	1.495	67.4	1.09
239	C6H5CL	Chlorobenzene	112.559	678.32	655.62	12.1219	5931.18	-100.08	1.106	67.4	1.10
240	C6H5F	Fluorobenzene	96.104	548.18	660.03	12.6030	5727.06	-67.66	1.024	67.4	1.10
241	C6H5I	Iodobenzene	204.011	837.80	655.62	12.1997	6797.70	-115.88	1.855	38.6	1.09
242	C6H6	Benzene	78.114	551.78	710.01	11.9551	5019.30	-94.25	0.885	60.2	1.11
243	C6H60	Phenol	94.113	789.56	889.35	12.4822	6283.44	-177.46	1.059	103.4	1.09
244	C6H7N	Aniline	93.129	798.20	770.28	12.7291	6943.50	-131.67	1.022	67.4	1.08
245	C6H7N	4-Methyl Pyridine	93.129	702.80	646.80	12.2686	6136.92	-112.77	0.955	67.4	1.09
246	C6H10	1,5-Hexadiene	82.146	452.60	499.80	12.1894	4911.30	-81.81	0.692	67.4	****
247	C6H10	Cyclohexene	82.146	548.72	630.63	11.8786	5064.30	-89.96	0.816	60.2	1.09
248	C6H100	Cyclohexanone	98.145	672.20	558.60	-3.9457	0.00	0.00	0.951	58.4	1.08
249	C6H12	Cyclohexane	84.162	536.12	590.94	11.8070	4979.88	-90.90	0.779	67.4	1.09
250	C6H12	Methylcyclopentane	84.162	498.86	549.78	11.8566	4915.80	-84.80	0.754	60.2	1.08
251	C6H12	1-Hexene	84.162	447.20	460.11	11.8632	4778.64	-85.14	0.673	67.4	1.07
252	C6H12	Cis-2-Hexene	84.162	472.40	476.28	12.2600	5216.22	-70.74	0.687	67.4	1.07
253	C6H12	Trans-2-Hexene	84.162	468.80	474.81	11.9270	4863.06	-87.52	0.678	67.4	1.07
254	C6H12	Cis-3-Hexene	84.162	470.60	476.28	11.8927	4824.90	-87.12	0.680	67.4	1.07
255	C6H12	Trans-3-Hexene	84.162	475.82	471.87	11.9831	4893.48	-85.99	0.677	67.4	1.07
256	C6H12	2-Methyl-2-Pentene	84.162	472.40	476.28	11.9966	4906.44	-85.75	0.691	60.2	1.07
257	C6H12	3-Methyl-Cis-2-Pentene	84.162	472.40	476.28	11.9667	4917.06	-83.65	0.694	67.4	1.07
258	C6H12	3-Methyl-Trans-2-Pentene	84.162	477.80	477.75	12.0027	4950.90	-86.99	0.698	67.4	1.07
259	C6H12	4-Methyl-Cis-2-Pentene	84.162	422.00	441.00	11.8070	4644.90	-83.81	0.669	67.4	1.07
260	C6H12	4-Methyl-Trans-2-Pentene	84.162	427.40	441.00	11.8968	4736.70	-82.80	0.669	67.4	1.06
261	C6H12	2,3-Dimethyl-1-Butene	84.162	441.80	470.40	11.8555	4702.68	-78.80	0.678	67.4	1.06
262	C6H12	2,3-Dimethyl-2-Butene	84.162	483.20	488.04	12.0586	5037.48	-85.88	0.708	67.4	1.07
263	C6H12	2,3-Dimethyl-1-Butene	84.162	422.00	471.87	11.4298	4188.24	-86.83	0.653	67.4	1.07
264	C6H120	Cyclohexanol	100.161	665.00	543.90	-3.9457	0.00	0.00	0.942	85.4	1.07
265	C6H120	Methyl Isobutyl Keton	100.161	567.80	474.81	11.7708	5208.48	-127.35	0.801	67.4	1.06
266	C6H1202	N-Butyl Acetate	116.160	582.20	455.70	12.2379	5671.80	-124.47	0.898	31.4	1.06
267	C6H1202	Isobutyl Acetate	116.160	549.80	441.00	12.2257	5567.04	-119.07	0.875	67.4	1.06
268	C6H1202	Ethyl Butyrate	116.160	558.80	455.70	12.0530	5629.68	-108.27	0.879	67.4	1.06
269	C6H1202	Ethyl Isobutyrate	116.160	535.40	441.00	-3.9457	0.00	0.00	0.869	67.4	****
270	C6H1202	N-Propyl Propionate	116.161	580.40	0.00	12.9184	6404.58	-86.15	0.881	67.4	****
271	C6H14	N-Hexane	86.178	453.32	430.71	11.8909	4855.50	-87.80	0.659	67.4	1.06
272	C6H14	2-Methyl Pentane	86.178	435.50	436.59	11.8019	4705.74	-83.84	0.653	67.4	1.06
273	C6H14	3-Methyl Pentane	86.178	447.92	452.76	11.8244	4776.12	-82.84	0.664	67.4	1.06
274	C6H14	2,2-Dimethyl Butane	86.178	419.66	446.88	11.6079	4481.10	-78.86	0.649	67.4	1.06
275	C6H14	2,3-Dimethyl Butane	86.178	439.82	454.23	11.7345	4671.72	-79.65	0.662	67.4	1.06
276	C6H140	1-Hexanol	102.177	638.00	588.00	14.1537	7299.72	-137.68	0.819	67.4	1.06

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
277	C6H140	Ethyl Butyl Ether	102.177	495.80	441.00	12.1020	5258.70	-99.27	0.749	67.4	1.05
278	C6H140	Diisopropyl Ether	102.177	440.00	417.48	12.3960	5212.26	-77.67	0.724	67.4	1.06
279	C6H15N	Dipropylamine	101.193	530.00	455.70	12.6482	5866.20	-99.27	0.738	67.4	1.05
280	C6H15N	Triethylamine	101.193	503.00	441.00	11.9396	5188.14	-92.07	0.728	67.4	1.06
281	C7F14	Perfluoromethylcycloh	350.055	416.24	338.10	11.7673	4698.90	-111.47	0.000	-460.0	****
282	C7F16	Perfluoro-N-Heptane	388.051	394.64	235.20	12.0290	4895.28	-116.10	1.733	67.4	****
283	C7H5N	Benzonitrile	103.124	798.92	611.52	-3.9457	0.00	0.00	1.010	58.4	1.08
284	C7H60	Benzaldehyde	106.124	791.00	676.20	12.4044	6747.48	-119.02	1.045	67.4	1.08
285	C7H602	Benzoic Acid	122.124	893.60	661.50	13.2177	7543.26	-225.36	1.075	265.4	1.09
286	C7H8	Toluene	92.141	605.06	596.82	12.0680	5573.70	-96.61	0.867	67.4	1.09
287	C7H80	Methyl Phenyl Ether	108.140	693.80	605.64	12.2937	6175.44	-125.24	0.996	67.4	****
288	C7H80	Benzyl Alcohol	108.140	758.60	676.20	13.5125	7892.64	-131.67	1.041	76.4	1.07
289	C7H80	O-Cresol	108.140	795.68	726.18	11.9691	5949.54	-194.40	1.028	103.4	1.07
290	C7H80	M-Cresol	108.140	810.44	661.50	13.3421	7693.92	-133.36	1.034	67.4	1.07
291	C7H80	P-Cresol	108.140	808.28	746.76	12.2532	6262.74	-200.34	1.019	103.4	1.07
292	C7H9N	2,3-Dimethylpyridine	107.156	719.72	0.00	13.2035	7595.46	-59.47	0.942	76.4	****
293	C7H9N	2,5-Dimethylpyridine	107.156	699.56	0.00	12.3589	6381.18	-114.46	0.938	31.4	****
294	C7H9N	3,4-Dimethylpyridine	107.156	770.84	0.00	13.0060	7626.60	-74.97	0.954	76.4	****
295	C7H9N	3,5-Dimethylpyridine	107.156	740.96	0.00	12.9393	7392.42	-80.01	0.939	76.4	****
296	C7H9N	Methylphenylamine	107.156	801.80	754.11	12.3609	6761.16	-145.28	0.989	67.4	****
297	C7H9N	O-Toluidine	107.156	789.20	543.90	12.8377	7330.50	-129.87	0.998	67.4	****
298	C7H9N	M-Toluidine	107.156	816.20	602.70	12.8041	7344.54	-131.67	0.989	67.4	1.07
299	C7H9N	P-Toluidine	107.156	740.60	0.00	12.7511	7273.80	-129.87	0.964	121.4	****
300	C7H14	Cycloheptane	98.189	600.20	539.49	11.8361	5518.80	-102.24	0.81	67.4	1.07
301	C7H14	1,1-Dimethylcyclopent	98.189	524.60	499.80	11.7516	5054.22	-92.16	0.759	60.2	1.07
302	C7H14	Cis-1,2-Dimethylcyclo	98.189	556.64	499.80	11.8272	5260.14	-95.29	0.777	60.2	1.07
303	C7H14	Trans-1,2-Dimethylcyclo	98.189	535.76	499.80	11.8137	5150.70	-92.63	0.756	60.2	1.07
304	C7H14	Ethylcyclopentane	98.189	565.10	492.45	11.9124	5382.18	-94.45	0.771	60.2	1.07
305	C7H14	Methylcyclohexane	98.189	569.78	504.21	11.7648	5266.80	-93.15	0.774	60.2	1.07
306	C7H14	1-Heptene	98.189	506.96	411.60	11.9437	5211.90	-97.15	0.697	67.4	1.06
307	C7H14	2,3,3-Trimethyl-1-Butane	98.189	499.40	420.42	11.7079	4894.92	-89.21	0.705	67.4	****
308	C7H16	N-Heptane	100.205	512.36	396.90	11.9280	5240.34	-101.72	0.684	67.4	1.05
309	C7H16	2-Methylhexane	100.205	494.54	396.90	11.8804	5121.00	-96.48	0.679	67.4	1.05
310	C7H16	3-Methylhexane	100.205	503.36	408.66	11.8676	5140.08	-97.07	0.687	67.4	1.05
311	C7H16	2,2-Dimethylpentane	100.205	476.72	402.78	11.7460	4932.18	-89.73	0.674	67.4	1.05
312	C7H16	2,3-Dimethylpentane	100.205	507.14	421.89	11.8358	5131.08	-92.39	0.695	67.4	1.05
313	C7H16	2,4-Dimethylpentane	100.205	475.46	396.90	11.7722	4940.46	-92.74	0.673	67.4	1.05
314	C7H16	3,3-Dimethylpentane	100.205	505.34	427.77	11.7733	5092.38	-86.09	0.693	67.4	1.05
315	C7H16	3-Ethypentane	100.205	513.08	418.95	11.8860	5188.32	-95.87	0.698	67.4	1.05
316	C7H16	2,2,3-Trimethylbutane	100.205	495.98	429.24	11.6941	4975.92	-84.78	0.690	67.4	1.05
317	C7H160	1-Heptanol	116.204	679.40	441.00	11.3611	4727.52	-263.88	0.822	67.4	1.05
318	C8H403	Phthalic Anhydride	148.118	998.00	690.90	12.0527	8040.60	-149.67	0.000	-460.0	1.06
319	C8H8	Styrene	104.152	704.60	579.18	12.0736	5991.30	-114.70	0.906	67.4	1.07
320	C8H80	Methyl Phenyl Ketone	120.151	801.80	558.60	12.2927	6805.80	-146.07	1.032	58.4	1.07
321	C8H802	Methyl Benzoate	136.151	785.60	529.20	12.2815	6753.24	-146.07	1.086	67.4	1.07
322	C8H10	O-Xylene	106.168	674.36	540.96	12.1699	6111.90	-107.03	0.880	67.4	1.07
323	C8H10	M-Xylene	106.168	650.60	514.50	12.1933	6060.42	-104.47	0.864	67.4	1.07
324	C8H10	P-Xylene	106.168	649.16	510.09	12.1506	6023.88	-104.11	0.861	67.4	1.07
325	C8H10	Ethylbenzene	106.168	650.78	523.32	12.0738	5902.92	-107.91	0.867	67.4	1.07
326	C8H100	O-Ethylphenol	122.167	805.40	0.00	14.0153	8870.94	-82.35	1.037	31.4	****
327	C8H100	M-Ethylphenol	122.167	829.52	0.00	13.2498	7690.86	-154.94	1.025	31.4	****
328	C8H100	P-Ethylphenol	122.167	829.52	0.00	15.1448	10043.28	-79.47	0.000	-460.0	****
329	C8H100	Phenetole	122.167	704.60	496.86	12.2216	6251.76	-141.59	0.979	38.6	****
330	C8H100	2,3-Xylenol	122.167	841.04	0.00	12.2967	6704.10	-184.32	0.000	-460.0	****
331	C8H100	2,4-Xylenol	122.167	813.68	0.00	12.2999	6579.36	-186.84	0.000	-460.0	****
332	C8H100	2,5-Xylenol	122.167	841.40	0.00	12.2911	6601.14	-184.32	0.000	-460.0	****
333	C8H100	2,6-Xylenol	122.167	801.80	0.00	12.3352	6748.74	-153.99	0.000	-460.0	****
334	C8H100	3,4-Xylenol	122.167	853.64	0.00	12.3547	6720.30	-205.02	0.000	-460.0	****
335	C8H100	3,5-Xylenol	122.167	828.08	0.00	12.4735	6796.62	-196.20	0.000	-460.0	****
336	C8H11N	N, N-Dimethylaniline	121.183	776.60	526.26	13.0190	7696.80	-95.04	0.956	67.4	****
337	C8H16	1,1-Dimethylcyclohexa	112.216	603.80	430.71	11.7078	5477.94	-99.54	0.785	60.2	1.06
338	C8H16	Cis-1,2-Dimethylcyclo	112.216	630.80	430.71	11.7981	5666.94	-103.16	0.796	67.4	1.06
339	C8H16	Trans-1,2-Dimethylcyc	112.216	612.80	430.71	11.7880	5611.32	-97.24	0.776	67.4	1.06
340	C8H16	Cis-1,3-Dimethylcyclo	112.216	603.80	430.71	11.8013	5547.42	-99.14	0.766	67.4	1.06
341	C8H16	Trans-1,3-Dimethylcyc	112.216	616.40	430.71	11.7914	5569.02	-103.97	0.785	67.4	1.06
342	C8H16	Cis-1,4-Dimethylcyclo	112.216	616.40	430.71	11.7876	5576.94	-102.60	0.783	67.4	1.06
343	C8H16	Trans-1,4-Dimethylcyc	112.216	602.00	430.71	11.7527	5514.12	-98.23	0.763	67.4	1.06
344	C8H16	Ethylcyclohexane	112.216	636.20	439.53	11.8668	5729.76	-104.67	0.788	67.4	1.06
345	C8H16	1,1,2-Trimethylcyclop	112.216	583.10	426.30	11.7627	5427.90	-98.26	0.000	-460.0	****
346	C8H16	1,1,3-Trimethylcyclop	112.216	565.10	410.13	11.7337	5288.40	-95.85	0.000	-460.0	****

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
347	C8H16	Cis,Cis,Trans-1,2,4-T	112.216	582.20	417.48	11.8086	5533.02	-97.56	0.000	-460.0	****
348	C8H16	Cis,Trans,Cis-1,2,4-T	112.216	567.80	407.19	11.8299	5417.46	-95.81	0.000	-460.0	****
349	C8H16	1-Methyl-1-Ethylcyclo	112.216	605.60	433.65	11.8765	5617.08	-99.11	0.000	-460.0	****
350	C8H16	N-Propylcyclopentane	112.216	625.40	435.12	11.9512	5737.68	-107.98	0.781	60.2	1.06
351	C8H16	Isopropylcyclopentane	112.216	621.80	435.12	11.9104	5717.16	-99.32	0.776	67.4	****
352	C8H16	1-Octene	112.216	559.88	380.73	12.0173	5609.70	-108.70	0.715	67.4	1.05
353	C8H16	Trans-2-Octene	112.216	584.00	401.31	11.9097	5642.82	-104.40	0.720	67.4	1.05
354	C8H18	N-Octane	114.232	563.84	360.15	11.9969	5616.36	-114.53	0.703	67.4	1.05
355	C8H18	2-Methylheptane	114.232	547.28	360.15	11.9821	5543.28	-107.03	0.702	60.2	1.05
356	C8H18	3-Methylheptane	114.232	554.48	368.97	11.9408	5518.62	-109.33	0.706	67.4	1.05
357	C8H18	4-Methylheptane	114.232	551.06	368.97	11.9436	5502.60	-109.06	0.705	67.4	1.05
358	C8H18	2,2-Dimethylexane	114.232	529.64	367.50	11.7974	5278.50	-104.54	0.695	67.4	1.05
359	C8H18	2,3-Dimethylhexane	114.232	554.12	380.74	11.8732	5452.31	-106.18	0.712	67.4	1.05
360	C8H18	2,4-Dimethylhexane	114.232	536.30	370.44	11.8340	5337.72	-105.05	0.700	67.4	1.05
361	C8H18	2,5-Dimethylhexane	114.232	530.00	360.15	11.8497	5335.20	-105.73	0.693	67.4	1.05
362	C8H18	3,3-Dimethylhexane	114.232	551.60	385.14	11.8298	5420.70	-100.28	0.710	67.4	1.05
363	C8H18	3,4-Dimethylhexane	114.232	563.84	391.02	11.8958	5512.50	-104.92	0.719	67.4	1.05
364	C8H18	3-Ethylhexane	114.232	557.72	377.79	11.9214	5503.50	-108.99	0.718	60.2	1.05
365	C8H18	2,2,3-Trimethylpenta	114.232	554.12	395.43	11.7705	5366.70	-98.51	0.716	67.4	1.05
366	C8H18	2,2,4-Trimethylpenta	114.232	519.02	371.91	11.7393	5213.16	-94.34	0.692	67.4	1.05
367	C8H18	2,3,3-Trimethylpenta	114.232	572.30	408.66	11.8121	5504.22	-94.99	0.726	67.4	1.05
368	C8H18	2,3,4-Trimethylpenta	114.232	559.34	395.43	11.8361	5450.40	-100.12	0.719	67.4	1.05
369	C8H18	2-Methyl-3-Ethylpenta	114.232	560.60	392.49	11.8583	5463.00	-104.11	0.719	67.4	1.05
370	C8H18	3-Methyl-3-Ethylpenta	114.232	577.70	407.19	11.8669	5583.60	-96.25	0.727	67.4	1.05
371	C8H180	1-Octanol	130.231	724.40	499.80	11.7971	5432.04	-246.78	0.826	67.4	1.04
372	C8H180	2-Octanol	130.231	686.60	396.90	10.7651	4394.88	-271.26	0.821	67.4	1.04
373	C8H180	2-Ethylhexanol	130.231	643.40	399.84	11.4157	4992.12	-252.00	0.833	67.4	1.04
374	C8H180	Butyl Ether	130.231	584.00	367.50	12.1321	5932.98	-119.07	0.768	67.4	1.04
375	C819N	Dibutylamine	129.247	612.80	367.50	12.7850	6699.42	-115.47	0.767	67.4	1.04
376	C9H10	Alpha-Methyl Styrene	118.179	717.20	493.92	12.3851	6559.74	-120.87	0.911	67.4	1.06
377	C9H1002	Ethyl Benzoate	150.178	794.60	470.40	12.2608	6921.00	-151.47	1.046	67.4	1.05
378	C9H12	N-Propylbenzene	120.195	688.94	464.52	12.0605	6180.84	-118.82	0.862	67.4	1.06
379	C9H12	Isopropylbenzene	120.195	675.80	465.99	12.0265	6054.48	-114.07	0.862	67.4	1.06
380	C9H12	1-Methyl-2-Ethylbenze	120.195	711.80	441.00	12.1796	6363.54	-118.53	0.881	67.4	1.06
381	C9H12	1-Methyl-3-Ethylbenze	120.195	686.60	411.60	12.2088	6337.80	-116.35	0.865	67.4	1.06
382	C9H12	1-Methyl-4-Ethylbenze	120.195	692.00	426.30	12.1678	6329.34	-115.61	0.861	67.4	1.06
383	C9H12	1,2,3-Trimethylbenzene	120.195	736.10	501.27	12.2664	6606.36	-118.93	0.894	67.4	1.06
384	C9H12	1,2,4-Trimethylbenzene	120.195	708.38	468.93	12.2733	6520.50	-116.26	0.880	60.2	1.06
385	C9H12	1,3,5-Trimethylbenzene	120.195	687.14	454.23	12.3436	6505.38	-114.43	0.865	67.4	1.06
386	C9H18	N-Propylcyclohexane	126.243	690.20	407.19	11.9110	6054.48	-117.38	0.793	67.4	1.05
387	C9H18	Isopropylcyclohexane	126.243	692.00	411.60	11.8803	6022.98	-114.68	0.802	67.4	****
388	C9H18	1-Nonene	126.243	605.60	339.57	12.0661	5949.00	-121.70	0.745	31.4	1.04
389	C9H20	N-Nonane	128.259	610.28	335.16	12.0214	5924.52	-128.39	0.718	67.4	1.05
390	C9H20	2,2,3-Trimethylhexane	128.259	598.40	361.62	11.8560	5695.38	-110.99	0.000	-460.0	1.04
391	C9H20	2,2,4-Trimethylhexane	128.259	572.66	343.98	11.8182	5551.20	-111.49	0.720	60.2	1.04
392	C9H20	2,2,5-Trimethylhexane	128.259	562.40	338.10	11.7988	5493.78	-112.03	0.717	60.2	1.04
393	C9H20	3,3-Diethylpentane	128.259	638.00	388.08	11.9252	6014.88	-103.63	0.752	67.4	1.04
394	C9H20	2,2,3,3-Tetramethylpe	128.259	633.68	396.90	11.7823	5796.90	106.76	0.000	-460.0	1.04
395	C9H20	2,2,3,4-Tetramethylpe	128.259	606.86	377.79	11.7906	5701.32	104.78	0.000	-460.0	1.04
396	C9H20	2,2,4,4-Tetramethylpe	128.259	574.46	360.15	11.7031	5489.82	-102.83	0.719	67.4	1.04
397	C9H20	2,3,3,4-Tetramethylpe	128.259	633.68	393.96	11.8572	5884.20	-104.74	0.000	-460.0	1.04
398	C10H8	Naphthalene	128.174	887.12	588.00	12.1969	7185.60	-128.32	0.971	193.4	1.04
399	C10H12	1,2,3,4-Tetrahydronap	132.206	834.20	510.09	12.3348	7216.92	-116.80	0.973	67.4	****
400	C10H14	N-Butylbenzene	134.222	728.90	418.95	12.1336	6540.12	-129.19	0.860	67.4	1.05
401	C10H14	Isobutylbenzene	134.222	710.00	455.70	12.0067	6322.32	-124.25	0.853	67.4	****
402	C10H14	Sec-Butylbenzene	134.222	735.20	427.77	12.0542	6379.38	-122.58	0.862	67.4	1.05
403	C10H14	Tert-Butylbenzene	134.222	728.00	430.71	11.9843	6231.96	-125.77	0.867	67.4	1.05
404	C10H14	1-Methyl-2-Isopropylb	134.222	746.00	420.42	12.0352	6416.10	-126.00	0.876	67.4	****
405	C10H14	1-Methyl-3-Isopropylb	134.222	738.80	426.30	12.0354	6378.66	-124.60	0.861	67.4	1.05
406	C10H14	1-Methyl-4-Isopropylb	134.222	715.40	410.13	11.9967	6370.56	-126.18	0.857	67.4	****
407	C10H14	“1,4-Diethylbenzene”	134.222	724.22	407.19	12.1683	6582.96	-128.12	0.862	67.4	1.05
408	C10H14	“1,2,4,5-Tetramethylbe”	134.222	755.00	426.30	12.3566	6931.62	-129.10	0.838	177.2	1.05
409	C10H15N	N-Butylaniline	149.236	837.80	411.60	12.4537	7343.46	-173.07	0.932	67.4	1.05
410	C10H18	Cis-Decalin	138.254	803.96	455.70	11.8855	6608.88	-125.53	0.897	67.4	1.05
411	C10H18	Trans-Decalin	138.254	782.00	455.70	11.8532	6499.08	-119.68	0.870	67.4	1.05
412	C10H19N	Caprylonitrile	153.269	659.60	471.87	-3.9457	0.00	0.00	0.820	67.4	****
413	C10H20	N-Butylcyclohexane	140.270	740.60	457.17	11.9659	6376.50	-130.18	0.799	67.4	1.04
414	C10H20	Isobutylcyclohexane	140.270	726.20	452.76	11.8684	6188.22	-125.98	0.795	67.4	****
415	C10H20	Sec-Butylcyclohexane	140.270	744.20	388.08	11.9213	6344.10	-127.40	0.813	67.4	****
416	C10H20	Tert-Butylcyclohexane	140.270	726.20	386.61	11.8427	6224.04	-120.67	0.813	67.4	****

No.	Formula	Name	MOL WT	TC	PC	A	B	C	GFB	TB	K
417	C10H20	1-Decene	140.270	647.00	320.46	12.0672	6206.58	-136.96	0.741	67.4	1.04
418	C10H22	N-Decane	142.286	651.68	305.76	12.0657	6222.24	-141.61	0.730	67.4	1.04
419	C10H22	3,3,5-Trimethylheptan	142.286	637.28	336.63	11.8391	5949.36	-121.79	0.000	-460.0	1.04
420	C10H22	2,2,3,3-Tetramethylhe	142.286	661.58	364.56	11.8141	6067.80	-115.36	0.000	-460.0	1.04
421	C10H22	2,2,5,5-Tetramethylhe	142.286	586.70	317.52	11.8989	5711.22	-119.07	0.000	-460.0	1.04
422	C10H220	1-Decanol	158.285	800.00	323.40	11.9938	6100.92	-250.20	0.830	67.4	1.04
423	C11H10	1-Methylnaphthalene	142.201	929.60	517.44	12.2551	7572.06	-140.67	1.020	67.4	1.06
424	C11H10	2-Methylnaphthalene	142.201	909.80	508.62	12.3301	7627.14	-134.55	0.990	103.4	1.06
425	C11H1402	Butyl Benzoate	178.232	841.40	382.20	12.3906	7485.12	-169.47	1.006	67.4	1.04
426	C11H22	N-Hexylcyclopentane	154.297	728.18	310.17	12.0683	6664.50	-146.79	0.000	-460.0	1.04
427	C11H22	1-Undecene	154.297	686.60	289.59	12.0955	6475.86	-150.14	0.751	67.4	1.04
428	C11H24	N-Undecane	156.313	689.84	285.18	12.1084	6505.20	-153.81	0.740	67.4	1.03
429	C12H10	Diphenyl	154.212	960.20	558.60	12.7375	8283.96	-126.76	0.990	164.6	1.06
430	C12H100	Diphenyl Ether	170.211	918.80	455.70	12.4002	7758.36	-157.16	1.066	85.4	1.05
431	C12H24	N-Heptylcyclopentane	168.324	762.20	282.24	12.1132	6930.54	-159.75	0.000	-460.0	1.04
432	C12H24	1-Dodecene	168.324	722.60	269.01	12.1153	6713.64	-163.58	0.758	67.4	1.03
433	C12H26	N-Dodecane	170.340	724.94	264.60	12.1677	6794.10	-164.36	0.748	67.4	1.03
434	C12H260	Dihexyl Ether	186.339	722.60	264.60	12.3915	7168.86	-160.47	0.794	67.4	1.03
435	C12H260	Dodecanol	186.339	762.20	279.30	11.3181	5835.60	-282.78	0.835	67.4	1.03
436	C12H27N	Tributylamine	185.355	697.40	264.60	12.3421	6957.90	-155.07	0.779	67.4	1.03
437	C13H12	Dipenylmethane	168.239	920.60	432.18	10.5399	5224.32	-302.22	1.006	67.4	****
438	C13H26	N-Octylcyclopentane	182.351	789.20	260.19	12.1484	7169.40	-172.53	0.000	-460.0	1.03
439	C13H26	1-Tridecene	182.351	753.20	246.96	12.1393	6941.16	-176.29	0.766	67.4	1.03
440	C13H28	N-Tridecane	184.367	756.44	249.90	12.1898	7007.22	-178.07	0.756	67.4	1.03
441	C14H10	Anthracene	178.234	1129.40	0.00	13.7244	11686.32	-47.03	0.000	-460.0	1.05
442	C14H10	Phenanthrene	178.234	1120.40	0.00	12.7730	9860.22	-124.90	0.000	-460.0	1.05
443	C14H28	N-Nonylcyclopentane	196.378	818.90	239.61	12.1632	7373.34	-185.40	0.000	-460.0	
444	C14H28	I-Tetradecene	196.378	780.20	226.38	12.2186	7232.40	-184.86	0.786	31.4	
445	C14H30	N-Tetradecane	198.394	789.20	235.20	12.2023	7215.30	-189.72	0.763	67.4	
446	C15H30	N-Decylcyclopentane	210.405	842.84	220.50	12.1804	7567.02	-197.46	0.000	-460.0	
447	C15H30	1-Pentadecene	210.405	807.20	211.68	12.2082	7385.58	-199.08	0.791	31.4	
448	C15H32	N-Pentadecane	212.421	812.60	220.50	12.2267	7418.70	-201.24	0.769	67.4	
449	C16H2204	Dibutyl-O-Phthalate	278.350	-460.00	0.00	13.0082	8734.32	-248.58	1.047	67.4	
450	C16H32	N-Decylcylohexane	224.432	890.00	196.98	12.2170	7871.94	-201.24	0.000	-460.0	
451	C16H32	1-Hexadecene	224.432	830.60	194.04	12.2746	7641.00	-207.36	0.788	49.4	
452	C16H34	N-Hexadecane	226.448	830.60	205.80	12.2384	7586.82	-213.66	0.773	67.4	
453	C17H34	N-Dodecylcyclopentane	238.459	890.00	188.16	12.2458	7912.44	-223.56	0.000	-460.0	
454	C17H360	Heptadecanol	256.474	864.80	205.80	11.6704	6610.68	-338.58	0.848	128.6	
455	C17H36	N-Heptadecane	240.475	859.40	191.10	12.2053	7730.10	-223.20	0.778	67.4	
456	C18H14	O-Terphenyl	230.310	1143.80	565.95	-3.9457	0.00	0.00	0.000	-460.0	
457	C18H14	M-Terphenyl	230.310	1204.64	508.62	-3.9457	0.00	0.00	0.000	-460.0	
458	C18H14	P-Terphenyl	230.310	1206.80	482.16	-3.9457	0.00	0.00	0.000	-460.0	
459	C18H36	1-Octadecene	252.486	870.20	164.64	12.2764	7948.98	-229.14	0.789	67.4	
460	C18H36	N-Tridecylcyclopentane	252.486	909.80	174.93	12.2813	8069.58	-236.34	0.000	-460.0	
461	C18H38	N-Octadecane	254.502	881.00	174.93	12.1775	7851.06	-233.82	0.777	81.8	
462	C18H380	I-Octadecanol	270.501	884.60	205.80	11.7441	6764.04	-347.58	0.812	137.6	
463	C19H38	N-Tetradecylcyclopent	266.513	929.60	163.17	12.3175	7990.74	-248.58	0.000	-460.0	
464	C19H40	N-Nonadecane	268.529	900.80	161.70	12.2076	8010.72	-244.08	0.789	89.0	
465	C20H40	N-Pentadecylcyclopent	280.540	944.00	148.47	12.3635	8355.60	-261.18	0.000	-460.0	
466	C20H42	N-Eicosane	282.556	920.60	161.70	12.5228	8424.72	-253.98	0.775	103.4	
467	C20H420	1-Eicosanol	298.555	926.00	176.40	11.8776	7041.78	-365.58	0.000	-460.0	
468	C21H42	N-Hexadecylcyclopenta	294.567	963.80	141.12	12.4096	8488.08	-273.78	0.000	-460.0	