



RS-24

(R426A)

THERMODYNAMIC TABLES

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sat -50 [0.25919 bar]				sat -40 [0.45972 bar]			
Temp [C]	Volume [m³/kg]	Enthalpy [kJ/kg]	Entropy [kJ/K-kg]	Temp [C]	Volume [m³/kg]	Enthalpy [kJ/kg]	Entropy [kJ/K-kg]
-50	0.6863	364.01	1.7783	-40	0.4010	370.53	1.7613
-48	0.6929	365.46	1.7848	-38	0.4048	372.04	1.7678
-46	0.6995	366.92	1.7912	-36	0.4086	373.55	1.7742
-44	0.7060	368.39	1.7976	-34	0.4124	375.07	1.7805
-42	0.7125	369.86	1.8040	-32	0.4161	376.59	1.7869
-40	0.7190	371.33	1.8104	-30	0.4199	378.12	1.7932
-38	0.7255	372.81	1.8167	-28	0.4236	379.65	1.7995
-36	0.7320	374.30	1.8230	-26	0.4273	381.19	1.8057
-34	0.7385	375.79	1.8292	-24	0.4310	382.73	1.8119
-32	0.7450	377.29	1.8355	-22	0.4347	384.28	1.8181
-30	0.7514	378.80	1.8417	-20	0.4384	385.84	1.8243
-28	0.7579	380.31	1.8479	-18	0.4421	387.40	1.8305
-26	0.7643	381.83	1.8541	-16	0.4458	388.97	1.8366
-24	0.7708	383.36	1.8602	-14	0.4495	390.54	1.8427
-22	0.7772	384.89	1.8664	-12	0.4532	392.12	1.8487
-20	0.7836	386.43	1.8725	-10	0.4569	393.71	1.8548
-18	0.7900	387.97	1.8785	-8	0.4605	395.30	1.8608
-16	0.7964	389.53	1.8846	-6	0.4642	396.90	1.8668
-14	0.8028	391.09	1.8906	-4	0.4679	398.51	1.8728
-12	0.8092	392.65	1.8967	-2	0.4715	400.12	1.8788
-10	0.8156	394.23	1.9027	0	0.4752	401.74	1.8848
-8	0.8220	395.81	1.9087	2	0.4788	403.37	1.8907
-6	0.8284	397.40	1.9146	4	0.4824	405.00	1.8966
-4	0.8348	398.99	1.9206	6	0.4861	406.64	1.9025
-2	0.8412	400.59	1.9265	8	0.4897	408.28	1.9084
0	0.8476	402.20	1.9324	10	0.4934	409.94	1.9142
2	0.8539	403.82	1.9383	12	0.4970	411.59	1.9201
4	0.8603	405.44	1.9442	14	0.5006	413.26	1.9259
6	0.8667	407.07	1.9500	16	0.5042	414.93	1.9317
8	0.8730	408.71	1.9559	18	0.5079	416.61	1.9375
10	0.8794	410.35	1.9617	20	0.5115	418.30	1.9432
12	0.8857	412.00	1.9675	22	0.5151	419.99	1.9490
14	0.8921	413.66	1.9733	24	0.5187	421.69	1.9547
16	0.8984	415.32	1.9791	26	0.5223	423.40	1.9605
18	0.9048	416.99	1.9848	28	0.5259	425.11	1.9662
20	0.9111	418.67	1.9906	30	0.5295	426.83	1.9719
22	0.9175	420.36	1.9963	32	0.5331	428.56	1.9775
24	0.9238	422.05	2.0020	34	0.5367	430.29	1.9832
26	0.9301	423.75	2.0077	36	0.5403	432.03	1.9889
28	0.9365	425.46	2.0134	38	0.5439	433.78	1.9945
30	0.9428	427.17	2.0191	40	0.5475	435.53	2.0001
32	0.9491	428.89	2.0248	42	0.5511	437.30	2.0057
34	0.9555	430.62	2.0304	44	0.5547	439.06	2.0113
36	0.9618	432.35	2.0360	46	0.5583	440.84	2.0169
38	0.9681	434.10	2.0416	48	0.5619	442.62	2.0224
40	0.9744	435.84	2.0472	50	0.5655	444.41	2.0280
42	0.9808	437.60	2.0528	52	0.5691	446.20	2.0335
44	0.9871	439.36	2.0584	54	0.5727	448.00	2.0391
46	0.9934	441.13	2.0640	56	0.5762	449.81	2.0446
48	0.9997	442.91	2.0695	58	0.5798	451.63	2.0501
50	1.0060	444.69	2.0751	60	0.5834	453.45	2.0556
52	1.0123	446.48	2.0806	62	0.5870	455.28	2.0610
54	1.0187	448.28	2.0861	64	0.5906	457.11	2.0665
56	1.0250	450.08	2.0916	66	0.5941	458.95	2.0719
58	1.0313	451.89	2.0971	68	0.5977	460.80	2.0774
60	1.0376	453.71	2.1025	70	0.6013	462.66	2.0828
62	1.0439	455.53	2.1080	72	0.6049	464.52	2.0882
64	1.0502	457.37	2.1134	74	0.6084	466.39	2.0936
66	1.0565	459.20	2.1189	76	0.6120	468.26	2.0990
68	1.0628	461.05	2.1243	78	0.6156	470.15	2.1044
70	1.0691	462.90	2.1297	80	0.6192	472.04	2.1097
72	1.0754	464.76	2.1351	82	0.6227	473.93	2.1151
74	1.0817	466.62	2.1405	84	0.6263	475.83	2.1204
76	1.0880	468.49	2.1459	86	0.6299	477.74	2.1257
78	1.0943	470.37	2.1512	88	0.6334	479.66	2.1311
80	1.1006	472.26	2.1566	90	0.6370	481.58	2.1364
82	1.1069	474.15	2.1619	92	0.6406	483.51	2.1417
84	1.1132	476.05	2.1673	94	0.6441	485.44	2.1470
86	1.1195	477.96	2.1726	96	0.6477	487.38	2.1522
88	1.1258	479.87	2.1779	98	0.6513	489.38	2.1577
90	1.1321	481.79	2.1832	100	0.6548	491.26	2.1626
92	1.1384	483.71	2.1885	102	0.6584	493.25	2.1680
94	1.1446	485.65	2.1938	104	0.6619	495.22	2.1732
96	1.1509	487.58	2.1990	106	0.6655	497.19	2.1784
98	1.1580	489.93	2.2062	108	0.6691	499.17	2.1837
100	1.1652	492.33	2.2136	110	0.6726	501.16	2.1889



sat -30 [0.76922 bar]				sat -20 [1.2251 bar]			
Temp [C]	Volume [m ³ /kg]	Enthalpy [kJ/kg]	Entropy [kJ/K-kg]	Temp [C]	Volume [m ³ /kg]	Enthalp [kJ/kg]	Entropy [kJ/K-kg]
-30	0.2473	377.02	1.7481	-20	0.1595	383.45	1.7378
-28	0.2496	378.59	1.7545	-18	0.1610	385.08	1.7443
-26	0.2520	380.16	1.7609	-16	0.1625	386.72	1.7506
-24	0.2543	381.74	1.7673	-14	0.1640	388.36	1.7570
-22	0.2566	383.32	1.7736	-12	0.1655	390.00	1.7633
-20	0.2589	384.90	1.7799	-10	0.1670	391.64	1.7696
-18	0.2612	386.49	1.7861	-8	0.1685	393.29	1.7758
-16	0.2634	388.08	1.7923	-6	0.1699	394.94	1.7820
-14	0.2657	389.68	1.7985	-4	0.1714	396.60	1.7882
-12	0.2680	391.28	1.8047	-2	0.1729	398.26	1.7943
-10	0.2702	392.89	1.8108	0	0.1743	399.92	1.8004
-8	0.2725	394.50	1.8169	2	0.1758	401.59	1.8065
-6	0.2747	396.12	1.8230	4	0.1772	403.26	1.8126
-4	0.2770	397.75	1.8291	6	0.1787	404.94	1.8186
-2	0.2792	399.38	1.8351	8	0.1801	406.63	1.8246
0	0.2815	401.02	1.8411	10	0.1816	408.32	1.8306
2	0.2837	402.66	1.8471	12	0.1830	410.01	1.8366
4	0.2859	404.31	1.8531	14	0.1844	411.71	1.8425
6	0.2881	405.96	1.8590	16	0.1858	413.42	1.8484
8	0.2904	407.62	1.8649	18	0.1873	415.13	1.8543
10	0.2926	409.29	1.8708	20	0.1887	416.84	1.8602
12	0.2948	410.96	1.8767	22	0.1901	418.57	1.8661
14	0.2970	412.64	1.8826	24	0.1915	420.29	1.8719
16	0.2992	414.33	1.8885	26	0.1929	422.03	1.8777
18	0.3014	416.02	1.8943	28	0.1943	423.77	1.8835
20	0.3036	417.72	1.9001	30	0.1958	425.51	1.8893
22	0.3058	419.42	1.9059	32	0.1972	427.27	1.8951
24	0.3080	421.13	1.9117	34	0.1986	429.02	1.9008
26	0.3102	422.85	1.9174	36	0.2000	430.79	1.9065
28	0.3124	424.57	1.9232	38	0.2014	432.56	1.9122
30	0.3146	426.30	1.9289	40	0.2028	434.33	1.9179
32	0.3168	428.04	1.9346	42	0.2042	436.12	1.9236
34	0.3190	429.78	1.9403	44	0.2056	437.91	1.9293
36	0.3211	431.53	1.9460	46	0.2069	439.70	1.9349
38	0.3233	433.29	1.9516	48	0.2083	441.50	1.9405
40	0.3255	435.05	1.9573	50	0.2097	443.31	1.9461
42	0.3277	436.82	1.9629	52	0.2111	445.12	1.9517
44	0.3299	438.60	1.9685	54	0.2125	446.94	1.9573
46	0.3320	440.38	1.9741	56	0.2139	448.77	1.9629
48	0.3342	442.17	1.9797	58	0.2153	450.60	1.9684
50	0.3364	443.97	1.9853	60	0.2166	452.44	1.9740
52	0.3385	445.77	1.9909	62	0.2180	454.28	1.9795
54	0.3407	447.58	1.9964	64	0.2194	456.14	1.9850
56	0.3429	449.39	2.0019	66	0.2208	457.99	1.9905
58	0.3450	451.21	2.0075	68	0.2222	459.86	1.9960
60	0.3472	453.04	2.0130	70	0.2235	461.73	2.0014
62	0.3494	454.88	2.0185	72	0.2249	463.60	2.0069
64	0.3515	456.72	2.0239	74	0.2263	465.49	2.0123
66	0.3537	458.57	2.0294	76	0.2276	467.38	2.0177
68	0.3559	460.42	2.0349	78	0.2290	469.27	2.0232
70	0.3580	462.28	2.0403	80	0.2304	471.17	2.0286
72	0.3602	464.15	2.0457	82	0.2318	473.08	2.0339
74	0.3623	466.03	2.0511	84	0.2331	475.00	2.0393
76	0.3645	467.91	2.0565	86	0.2345	476.92	2.0447
78	0.3666	469.79	2.0619	88	0.2359	478.84	2.0500
80	0.3688	471.69	2.0673	90	0.2372	480.78	2.0554
82	0.3709	473.59	2.0727	92	0.2386	482.72	2.0607
84	0.3731	475.50	2.0780	94	0.2399	484.66	2.0660
86	0.3752	477.41	2.0834	96	0.2413	486.62	2.0713
88	0.3774	479.33	2.0887	98	0.2427	488.62	2.0768
90	0.3795	481.26	2.0940	100	0.2441	490.52	2.0818
92	0.3817	483.19	2.0993	102	0.2454	492.51	2.0872
94	0.3838	485.13	2.1046	104	0.2468	494.49	2.0924
96	0.3860	487.08	2.1099	106	0.2481	496.48	2.0977
98	0.3882	489.07	2.1154	108	0.2495	498.47	2.1029
100	0.3903	490.96	2.1204	110	0.2508	500.46	2.1081
102	0.3924	492.95	2.1257	112	0.2522	502.47	2.1134
104	0.3945	494.92	2.1310	114	0.2535	504.48	2.1186
106	0.3967	496.90	2.1362	116	0.2549	506.49	2.1238
108	0.3988	498.89	2.1414	118	0.2562	508.52	2.1289
110	0.4010	500.88	2.1466	120	0.2576	510.54	2.1341
112	0.4031	502.88	2.1518	122	0.2590	512.58	2.1393
114	0.4053	504.88	2.1570	124	0.2603	514.62	2.1444
116	0.4074	506.89	2.1622	126	0.2617	516.67	2.1496
118	0.4095	508.91	2.1674	128	0.2630	518.72	2.1547
120	0.4117	510.93	2.1725	130	0.2644	520.78	2.1598



sat -10 [1.8706 bar]				sat 0 [2.7542 bar]			
Temp [C]	Volume [m^3/ka]	Enthalpy [kJ/ka]	Entropy [kJ/K-]	Temp [C]	Volume [m^3/ka]	Enthalp [kJ/ka]	Entropy [kJ/K-]
-10	0.1068	389.76	1.7299	0	0.0737	395.92	1.7238
-8	0.1078	391.47	1.7363	2	0.0745	397.71	1.7303
-6	0.1088	393.18	1.7428	4	0.0752	399.49	1.7368
-4	0.1099	394.89	1.7491	6	0.0759	401.28	1.7432
-2	0.1109	396.59	1.7555	8	0.0767	403.06	1.7495
0	0.1119	398.30	1.7617	10	0.0774	404.84	1.7559
2	0.1129	400.02	1.7680	12	0.0781	406.62	1.7621
4	0.1139	401.73	1.7742	14	0.0788	408.41	1.7684
6	0.1149	403.45	1.7804	16	0.0795	410.19	1.7745
8	0.1159	405.17	1.7865	18	0.0802	411.98	1.7807
10	0.1169	406.89	1.7926	20	0.0809	413.77	1.7868
12	0.1178	408.62	1.7987	22	0.0816	415.56	1.7929
14	0.1188	410.35	1.8048	24	0.0823	417.35	1.7990
16	0.1198	412.09	1.8108	26	0.0830	419.15	1.8050
18	0.1208	413.83	1.8168	28	0.0837	420.95	1.8110
20	0.1217	415.57	1.8227	30	0.0843	422.76	1.8170
22	0.1227	417.32	1.8287	32	0.0850	424.57	1.8229
24	0.1237	419.08	1.8346	34	0.0857	426.38	1.8289
26	0.1246	420.84	1.8405	36	0.0864	428.20	1.8348
28	0.1256	422.60	1.8464	38	0.0870	430.02	1.8406
30	0.1265	424.37	1.8523	40	0.0877	431.84	1.8465
32	0.1275	426.15	1.8581	42	0.0884	433.67	1.8523
34	0.1284	427.93	1.8639	44	0.0890	435.51	1.8581
36	0.1294	429.71	1.8697	46	0.0897	437.35	1.8639
38	0.1303	431.50	1.8755	48	0.0904	439.19	1.8696
40	0.1313	433.30	1.8812	50	0.0910	441.04	1.8754
42	0.1322	435.10	1.8870	52	0.0917	442.90	1.8811
44	0.1332	436.91	1.8927	54	0.0923	444.76	1.8868
46	0.1341	438.72	1.8984	56	0.0930	446.62	1.8925
48	0.1350	440.54	1.9041	58	0.0936	448.49	1.8982
50	0.1360	442.36	1.9097	60	0.0943	450.37	1.9038
52	0.1369	444.19	1.9154	62	0.0949	452.25	1.9094
54	0.1378	446.03	1.9210	64	0.0956	454.13	1.9150
56	0.1388	447.87	1.9266	66	0.0962	456.02	1.9206
58	0.1397	449.72	1.9322	68	0.0969	457.92	1.9262
60	0.1406	451.57	1.9378	70	0.0975	459.82	1.9318
62	0.1415	453.43	1.9433	72	0.0982	461.73	1.9373
64	0.1425	455.30	1.9489	74	0.0988	463.64	1.9428
66	0.1434	457.17	1.9544	76	0.0994	465.56	1.9483
68	0.1443	459.05	1.9600	78	0.1001	467.48	1.9538
70	0.1452	460.93	1.9655	80	0.1007	469.41	1.9593
72	0.1461	462.82	1.9709	82	0.1013	471.35	1.9648
74	0.1470	464.71	1.9764	84	0.1020	473.29	1.9702
76	0.1480	466.62	1.9819	86	0.1026	475.24	1.9757
78	0.1489	468.52	1.9873	88	0.1032	477.19	1.9811
80	0.1498	470.44	1.9928	90	0.1039	479.15	1.9865
82	0.1507	472.36	1.9982	92	0.1045	481.11	1.9919
84	0.1516	474.28	2.0036	94	0.1051	483.08	1.9973
86	0.1525	476.21	2.0090	96	0.1058	485.06	2.0026
88	0.1534	478.15	2.0144	98	0.1064	487.08	2.0082
90	0.1543	480.09	2.0197	100	0.1070	489.00	2.0133
92	0.1553	482.04	2.0251	102	0.1077	491.02	2.0187
94	0.1562	484.00	2.0304	104	0.1083	493.02	2.0240
96	0.1571	485.96	2.0358	106	0.1089	495.02	2.0293
98	0.1580	487.98	2.0413	108	0.1095	497.03	2.0346
100	0.1588	489.88	2.0463	110	0.1102	499.05	2.0398
102	0.1598	491.89	2.0517	112	0.1108	501.07	2.0451
104	0.1607	493.87	2.0570	114	0.1114	503.10	2.0504
106	0.1616	495.87	2.0622	116	0.1120	505.13	2.0556
108	0.1625	497.86	2.0675	118	0.1126	507.17	2.0608
110	0.1634	499.87	2.0727	120	0.1133	509.22	2.0660
112	0.1643	501.88	2.0780	122	0.1139	511.27	2.0712
114	0.1652	503.90	2.0832	124	0.1145	513.33	2.0764
116	0.1661	505.92	2.0884	126	0.1151	515.40	2.0816
118	0.1670	507.95	2.0936	128	0.1157	517.47	2.0868
120	0.1679	509.99	2.0988	130	0.1164	519.54	2.0920
122	0.1688	512.03	2.1040	132	0.1170	521.62	2.0971
124	0.1697	514.08	2.1092	134	0.1176	523.71	2.1023
126	0.1706	516.13	2.1143	136	0.1182	525.80	2.1074
128	0.1715	518.19	2.1195	138	0.1188	527.90	2.1125
130	0.1724	520.26	2.1246	140	0.1194	530.01	2.1176
132	0.1733	522.33	2.1297	142	0.1201	532.12	2.1227
134	0.1742	524.41	2.1348	144	0.1207	534.24	2.1278
136	0.1751	526.50	2.1400	146	0.1213	536.36	2.1329
138	0.1760	528.59	2.1451	148	0.1219	538.49	2.1379
140	0.1768	530.69	2.1501	150	0.1225	540.63	2.1430



sat 10 [3.9294 bar]				sat 20 [5.5443 bar]			
Temp [C]	Volume [m ³ /kg]	Enthalp [kJ/kg]	Entropy [kJ/K-kg]	Temp [C]	Volume [m ³ /kg]	Enthalp [kJ/kg]	Entropy [kJ/K-kg]
10	0.0523	401.86	1.7190	20	0.0378	407.54	1.7153
12	0.0528	403.75	1.7257	22	0.0383	409.53	1.7220
14	0.0534	405.62	1.7322	24	0.0387	411.50	1.7287
16	0.0539	407.49	1.7387	26	0.0391	413.46	1.7353
18	0.0544	409.35	1.7451	28	0.0395	415.41	1.7418
20	0.0550	411.21	1.7515	30	0.0399	417.36	1.7482
22	0.0555	413.07	1.7578	32	0.0403	419.31	1.7546
24	0.0560	414.93	1.7641	34	0.0407	421.25	1.7610
26	0.0565	416.79	1.7703	36	0.0411	423.19	1.7673
28	0.0571	418.65	1.7765	38	0.0415	425.13	1.7735
30	0.0576	420.51	1.7827	40	0.0419	427.07	1.7797
32	0.0581	422.37	1.7888	42	0.0423	429.01	1.7859
34	0.0586	424.23	1.7949	44	0.0427	430.94	1.7920
36	0.0591	426.10	1.8009	46	0.0431	432.88	1.7981
38	0.0596	427.96	1.8069	48	0.0434	434.82	1.8042
40	0.0601	429.83	1.8129	50	0.0438	436.76	1.8102
42	0.0606	431.70	1.8189	52	0.0442	438.70	1.8162
44	0.0611	433.58	1.8248	54	0.0446	440.64	1.8222
46	0.0616	435.46	1.8307	56	0.0449	442.59	1.8281
48	0.0620	437.34	1.8366	58	0.0453	444.54	1.8340
50	0.0625	439.23	1.8425	60	0.0457	446.49	1.8399
52	0.0630	441.12	1.8483	62	0.0460	448.44	1.8457
54	0.0635	443.01	1.8541	64	0.0464	450.40	1.8515
56	0.0640	444.91	1.8599	66	0.0467	452.36	1.8573
58	0.0645	446.81	1.8656	68	0.0471	454.32	1.8631
60	0.0649	448.71	1.8714	70	0.0475	456.28	1.8688
62	0.0654	450.62	1.8771	72	0.0478	458.25	1.8746
64	0.0659	452.54	1.8828	74	0.0482	460.23	1.8803
66	0.0663	454.46	1.8885	76	0.0485	462.20	1.8859
68	0.0668	456.38	1.8941	78	0.0489	464.19	1.8916
70	0.0673	458.31	1.8997	80	0.0492	466.17	1.8972
72	0.0678	460.24	1.9054	82	0.0496	468.16	1.9028
74	0.0682	462.18	1.9110	84	0.0499	470.15	1.9084
76	0.0687	464.12	1.9165	86	0.0503	472.15	1.9140
78	0.0691	466.07	1.9221	88	0.0506	474.15	1.9196
80	0.0696	468.02	1.9277	90	0.0509	476.16	1.9251
82	0.0701	469.98	1.9332	92	0.0513	478.17	1.9306
84	0.0705	471.94	1.9387	94	0.0516	480.18	1.9361
86	0.0710	473.91	1.9442	96	0.0520	482.20	1.9416
88	0.0715	475.89	1.9497	98	0.0523	484.27	1.9472
90	0.0719	477.86	1.9551	100	0.0527	486.23	1.9524
92	0.0724	479.85	1.9606	102	0.0530	488.29	1.9580
94	0.0728	481.84	1.9660	104	0.0533	490.33	1.9634
96	0.0733	483.83	1.9714	106	0.0537	492.38	1.9688
98	0.0738	485.88	1.9770	108	0.0540	494.43	1.9742
100	0.0742	487.81	1.9821	110	0.0543	496.48	1.9796
102	0.0746	489.85	1.9876	112	0.0547	498.54	1.9849
104	0.0751	491.86	1.9929	114	0.0550	500.60	1.9903
106	0.0755	493.88	1.9983	116	0.0553	502.67	1.9956
108	0.0760	495.91	2.0036	118	0.0557	504.75	2.0009
110	0.0764	497.94	2.0089	120	0.0560	506.83	2.0062
112	0.0769	499.98	2.0142	122	0.0563	508.91	2.0115
114	0.0773	502.02	2.0195	124	0.0567	511.00	2.0168
116	0.0778	504.07	2.0248	126	0.0570	513.09	2.0221
118	0.0782	506.13	2.0301	128	0.0573	515.20	2.0273
120	0.0787	508.19	2.0353	130	0.0576	517.30	2.0325
122	0.0791	510.25	2.0406	132	0.0580	519.41	2.0378
124	0.0796	512.33	2.0458	134	0.0583	521.53	2.0430
126	0.0800	514.40	2.0510	136	0.0586	523.65	2.0482
128	0.0804	516.49	2.0562	138	0.0589	525.78	2.0534
130	0.0809	518.57	2.0614	140	0.0593	527.91	2.0585
132	0.0813	520.67	2.0666	142	0.0596	530.05	2.0637
134	0.0818	522.77	2.0718	144	0.0599	532.19	2.0689
136	0.0822	524.87	2.0769	146	0.0602	534.34	2.0740
138	0.0827	526.99	2.0821	148	0.0606	536.49	2.0791
140	0.0831	529.10	2.0872	150	0.0609	538.65	2.0842
142	0.0835	531.22	2.0923	152	0.0612	540.82	2.0893
144	0.0840	533.35	2.0975	154	0.0615	542.99	2.0944
146	0.0844	535.49	2.1026	156	0.0619	545.16	2.0995
148	0.0848	537.63	2.1077	158	0.0622	547.35	2.1046
150	0.0853	539.77	2.1127	160	0.0625	549.53	2.1096
152	0.0857	541.93	2.1178	162	0.0628	551.73	2.1147
154	0.0862	544.08	2.1229	164	0.0631	553.92	2.1197
156	0.0866	546.25	2.1279	166	0.0635	556.13	2.1248
158	0.0870	548.41	2.1330	168	0.0638	558.34	2.1298
160	0.0875	550.59	2.1380	170	0.0641	560.55	2.1348



sat 30 [7.3918 bar]				sat 40 [9.8101 bar]			
Temp [C]	Volume [m ³ /ka]	Enthalp [kJ/ka]	Entropy [kJ/K-]	Temp [C]	Volume [m ³ /ka]	Enthalp [kJ/ka]	Entropy [kJ/K-]
30	0.0279	412.87	1.7122	40	0.0208	417.75	1.7091
32	0.0282	414.97	1.7191	42	0.0211	420.00	1.7163
34	0.0286	417.06	1.7259	44	0.0214	422.22	1.7233
36	0.0289	419.13	1.7326	46	0.0216	424.42	1.7302
38	0.0292	421.19	1.7392	48	0.0219	426.60	1.7370
40	0.0295	423.24	1.7458	50	0.0222	428.77	1.7438
42	0.0299	425.28	1.7523	52	0.0224	430.93	1.7504
44	0.0302	427.32	1.7587	54	0.0227	433.07	1.7570
46	0.0305	429.35	1.7651	56	0.0230	435.21	1.7635
48	0.0308	431.38	1.7715	58	0.0232	437.34	1.7700
50	0.0311	433.40	1.7777	60	0.0235	439.46	1.7764
52	0.0314	435.43	1.7840	62	0.0237	441.58	1.7827
54	0.0317	437.45	1.7902	64	0.0239	443.69	1.7890
56	0.0320	439.46	1.7963	66	0.0242	445.80	1.7952
58	0.0323	441.48	1.8024	68	0.0244	447.91	1.8014
60	0.0326	443.50	1.8085	70	0.0247	450.01	1.8075
62	0.0329	445.52	1.8145	72	0.0249	452.11	1.8137
64	0.0332	447.53	1.8206	74	0.0251	454.21	1.8197
66	0.0335	449.55	1.8265	76	0.0253	456.31	1.8257
68	0.0337	451.57	1.8325	78	0.0256	458.40	1.8317
70	0.0340	453.59	1.8384	80	0.0258	460.50	1.8377
72	0.0343	455.61	1.8442	82	0.0260	462.60	1.8436
74	0.0346	457.64	1.8501	84	0.0262	464.70	1.8495
76	0.0349	459.66	1.8559	86	0.0265	466.79	1.8554
78	0.0351	461.69	1.8617	88	0.0267	468.89	1.8612
80	0.0354	463.72	1.8675	90	0.0269	471.00	1.8670
82	0.0357	465.76	1.8732	92	0.0271	473.10	1.8728
84	0.0360	467.79	1.8789	94	0.0273	475.20	1.8785
86	0.0362	469.83	1.8846	96	0.0275	477.31	1.8842
88	0.0365	471.87	1.8903	98	0.0278	479.46	1.8901
90	0.0368	473.92	1.8959	100	0.0280	481.50	1.8955
92	0.0370	475.97	1.9016	102	0.0282	483.64	1.9012
94	0.0373	478.02	1.9072	104	0.0284	485.75	1.9069
96	0.0376	480.08	1.9127	106	0.0286	487.87	1.9125
98	0.0378	482.18	1.9185	108	0.0288	489.99	1.9180
100	0.0380	484.18	1.9237	110	0.0290	492.12	1.9236
102	0.0383	486.26	1.9294	112	0.0292	494.24	1.9291
104	0.0386	488.34	1.9349	114	0.0294	496.37	1.9347
106	0.0389	490.41	1.9404	116	0.0296	498.51	1.9402
108	0.0391	492.49	1.9458	118	0.0298	500.64	1.9456
110	0.0394	494.57	1.9513	120	0.0300	502.78	1.9511
112	0.0396	496.66	1.9567	122	0.0302	504.93	1.9565
114	0.0399	498.75	1.9621	124	0.0304	507.08	1.9620
116	0.0402	500.85	1.9675	126	0.0306	509.23	1.9674
118	0.0404	502.95	1.9729	128	0.0308	511.38	1.9727
120	0.0407	505.06	1.9783	130	0.0310	513.54	1.9781
122	0.0409	507.17	1.9837	132	0.0312	515.71	1.9835
124	0.0412	509.28	1.9890	134	0.0314	517.87	1.9888
126	0.0414	511.40	1.9943	136	0.0316	520.05	1.9941
128	0.0417	513.52	1.9996	138	0.0318	522.22	1.9994
130	0.0419	515.65	2.0049	140	0.0320	524.40	2.0047
132	0.0422	517.79	2.0102	142	0.0322	526.59	2.0100
134	0.0424	519.92	2.0155	144	0.0324	528.78	2.0153
136	0.0427	522.07	2.0207	146	0.0326	530.97	2.0205
138	0.0429	524.22	2.0259	148	0.0328	533.17	2.0257
140	0.0432	526.37	2.0312	150	0.0330	535.37	2.0309
142	0.0434	528.53	2.0364	152	0.0332	537.58	2.0362
144	0.0437	530.69	2.0416	154	0.0333	539.79	2.0413
146	0.0439	532.86	2.0468	156	0.0335	542.00	2.0465
148	0.0442	535.03	2.0519	158	0.0337	544.23	2.0517
150	0.0444	537.21	2.0571	160	0.0339	546.45	2.0568
152	0.0447	539.39	2.0622	162	0.0341	548.68	2.0620
154	0.0449	541.58	2.0674	164	0.0343	550.92	2.0671
156	0.0451	543.77	2.0725	166	0.0345	553.16	2.0722
158	0.0454	545.97	2.0776	168	0.0347	555.40	2.0773
160	0.0456	548.18	2.0827	170	0.0349	557.65	2.0824
162	0.0459	550.38	2.0878	172	0.0350	559.91	2.0875
164	0.0461	552.60	2.0929	174	0.0352	562.17	2.0925
166	0.0464	554.82	2.0979	176	0.0354	564.43	2.0976
168	0.0466	557.04	2.1030	178	0.0356	566.70	2.1026
170	0.0468	559.27	2.1080	180	0.0358	568.97	2.1077
172	0.0471	561.51	2.1131	182	0.0360	571.25	2.1127
174	0.0473	563.75	2.1181	184	0.0362	573.54	2.1177
176	0.0476	565.99	2.1231	186	0.0364	575.83	2.1227
178	0.0478	568.25	2.1281	188	0.0365	578.12	2.1277
180	0.0480	570.50	2.1331	190	0.0367	580.42	2.1326



sat 50 [12.783 bar]				sat 60 [16.394 bar]			
Temp [C]	Volume [m ³ /ka]	Enthalp [kJ/ka]	Entropy [kJ/K-]	Temp [C]	Volume [m ³ /ka]	Enthalp [kJ/ka]	Entropy [kJ/K-]
50	0.0157	422.05	1.7058	60	0.0118	425.54	1.7015
52	0.0159	424.47	1.7133	62	0.0121	428.21	1.7095
54	0.0162	426.86	1.7206	64	0.0123	430.82	1.7172
56	0.0164	429.22	1.7278	66	0.0125	433.38	1.7248
58	0.0166	431.55	1.7349	68	0.0127	435.91	1.7322
60	0.0168	433.86	1.7418	70	0.0129	438.40	1.7395
62	0.0171	436.16	1.7487	72	0.0131	440.85	1.7467
64	0.0173	438.43	1.7554	74	0.0133	443.29	1.7537
66	0.0175	440.69	1.7621	76	0.0135	445.70	1.7606
68	0.0177	442.94	1.7687	78	0.0136	448.08	1.7674
70	0.0179	445.17	1.7753	80	0.0138	450.46	1.7742
72	0.0181	447.40	1.7817	82	0.0140	452.81	1.7808
74	0.0183	449.62	1.7882	84	0.0142	455.15	1.7874
76	0.0185	451.83	1.7945	86	0.0143	457.48	1.7939
78	0.0187	454.04	1.8008	88	0.0145	459.80	1.8003
80	0.0189	456.23	1.8070	90	0.0147	462.11	1.8067
82	0.0191	458.43	1.8132	92	0.0148	464.42	1.8130
84	0.0193	460.62	1.8194	94	0.0150	466.71	1.8193
86	0.0195	462.81	1.8255	96	0.0151	469.00	1.8255
88	0.0197	464.99	1.8316	98	0.0153	471.29	1.8317
90	0.0198	467.17	1.8376	100	0.0154	473.56	1.8378
92	0.0200	469.35	1.8436	102	0.0156	475.83	1.8439
94	0.0202	471.53	1.8495	104	0.0157	478.10	1.8499
96	0.0204	473.71	1.8554	106	0.0159	480.37	1.8559
98	0.0205	475.89	1.8614	108	0.0160	482.63	1.8619
100	0.0207	478.07	1.8672	110	0.0162	484.90	1.8678
102	0.0209	480.24	1.8730	112	0.0163	487.16	1.8737
104	0.0211	482.42	1.8788	114	0.0165	489.41	1.8795
106	0.0213	484.60	1.8846	116	0.0166	491.67	1.8853
108	0.0214	486.78	1.8903	118	0.0168	493.93	1.8911
110	0.0216	488.96	1.8960	120	0.0169	496.19	1.8969
112	0.0218	491.14	1.9017	122	0.0170	498.44	1.9026
114	0.0219	493.32	1.9073	124	0.0172	500.70	1.9083
116	0.0221	495.51	1.9129	126	0.0173	502.96	1.9140
118	0.0223	497.70	1.9186	128	0.0174	505.21	1.9196
120	0.0224	499.88	1.9241	130	0.0176	507.47	1.9252
122	0.0226	502.08	1.9297	132	0.0177	509.73	1.9308
124	0.0228	504.27	1.9352	134	0.0178	511.99	1.9364
126	0.0229	506.46	1.9407	136	0.0180	514.26	1.9419
128	0.0231	508.66	1.9462	138	0.0181	516.52	1.9475
130	0.0232	510.86	1.9517	140	0.0182	518.79	1.9530
132	0.0234	513.07	1.9572	142	0.0184	521.06	1.9584
134	0.0236	515.28	1.9626	144	0.0185	523.33	1.9639
136	0.0237	517.49	1.9680	146	0.0186	525.60	1.9693
138	0.0239	519.70	1.9734	148	0.0188	527.88	1.9747
140	0.0240	521.92	1.9788	150	0.0189	530.15	1.9801
142	0.0242	524.14	1.9842	152	0.0190	532.43	1.9855
144	0.0244	526.36	1.9895	154	0.0191	534.72	1.9909
146	0.0245	528.59	1.9948	156	0.0193	537.00	1.9962
148	0.0247	530.82	2.0001	158	0.0194	539.29	2.0015
150	0.0248	533.05	2.0054	160	0.0195	541.58	2.0068
152	0.0250	535.29	2.0107	162	0.0197	543.88	2.0121
154	0.0251	537.53	2.0160	164	0.0198	546.18	2.0174
156	0.0253	539.78	2.0212	166	0.0199	548.48	2.0226
158	0.0254	542.03	2.0264	168	0.0200	550.79	2.0279
160	0.0256	544.29	2.0317	170	0.0201	553.10	2.0331
162	0.0257	546.54	2.0369	172	0.0203	555.41	2.0383
164	0.0259	548.81	2.0421	174	0.0204	557.73	2.0435
166	0.0260	551.07	2.0472	176	0.0205	560.05	2.0487
168	0.0262	553.35	2.0524	178	0.0206	562.37	2.0538
170	0.0263	555.62	2.0575	180	0.0208	564.70	2.0590
172	0.0265	557.90	2.0627	182	0.0209	567.03	2.0641
174	0.0266	560.18	2.0678	184	0.0210	569.36	2.0692
176	0.0268	562.47	2.0729	186	0.0211	571.70	2.0744
178	0.0269	564.77	2.0780	188	0.0212	574.05	2.0794
180	0.0271	567.06	2.0831	190	0.0214	576.39	2.0845
182	0.0272	569.37	2.0881	192	0.0215	578.75	2.0896
184	0.0274	571.67	2.0932	194	0.0216	581.10	2.0946
186	0.0275	573.98	2.0982	196	0.0217	583.46	2.0997
188	0.0277	576.30	2.1033	198	0.0218	585.83	2.1047
190	0.0278	578.62	2.1083	200	0.0219	588.20	2.1097
192	0.0280	580.95	2.1133	202	0.0221	590.57	2.1147
194	0.0281	583.28	2.1183	204	0.0222	592.95	2.1197
196	0.0283	585.61	2.1233	206	0.0223	595.33	2.1247
198	0.0284	587.95	2.1283	208	0.0224	597.71	2.1297
200	0.0286	590.29	2.1332	210	0.0225	600.11	2.1346



sat 70 [20.738 bar]				sat 80 [25.935 bar]			
Temp [C]	Volume [m ³ /kg]	Enthalp [kJ/kg]	Entropy [kJ/K-]	Temp [C]	Volume [m ³ /kg]	Enthalp [kJ/kg]	Entropy [kJ/K-]
70	0.0089	427.86	1.6952	80	0.0066	428.32	1.6850
72	0.0091	430.90	1.7040	82	0.0068	432.01	1.6954
74	0.0093	433.83	1.7125	84	0.0071	435.47	1.7051
76	0.0095	436.68	1.7207	86	0.0072	438.76	1.7143
78	0.0097	439.47	1.7286	88	0.0074	441.93	1.7231
80	0.0099	442.19	1.7363	90	0.0076	444.99	1.7316
82	0.0101	444.87	1.7439	92	0.0078	447.97	1.7398
84	0.0102	447.50	1.7513	94	0.0079	450.87	1.7477
86	0.0104	450.10	1.7585	96	0.0081	453.72	1.7554
88	0.0106	452.66	1.7657	98	0.0082	456.52	1.7630
90	0.0107	455.20	1.7727	100	0.0084	459.26	1.7703
92	0.0109	457.71	1.7796	102	0.0085	461.97	1.7776
94	0.0110	460.20	1.7864	104	0.0086	464.64	1.7847
96	0.0112	462.68	1.7931	106	0.0088	467.29	1.7917
98	0.0113	465.14	1.7997	108	0.0089	469.91	1.7986
100	0.0115	467.57	1.8063	110	0.0090	472.51	1.8054
102	0.0116	470.00	1.8128	112	0.0091	475.08	1.8121
104	0.0117	472.41	1.8192	114	0.0093	477.64	1.8187
106	0.0119	474.82	1.8255	116	0.0094	480.18	1.8253
108	0.0120	477.21	1.8318	118	0.0095	482.71	1.8317
110	0.0121	479.60	1.8381	120	0.0096	485.22	1.8381
112	0.0123	481.98	1.8443	122	0.0097	487.72	1.8445
114	0.0124	484.35	1.8504	124	0.0098	490.21	1.8508
116	0.0125	486.72	1.8565	126	0.0099	492.69	1.8570
118	0.0126	489.08	1.8626	128	0.0100	495.16	1.8632
120	0.0128	491.43	1.8686	130	0.0101	497.62	1.8693
122	0.0129	493.79	1.8745	132	0.0102	500.08	1.8754
124	0.0130	496.13	1.8805	134	0.0104	502.53	1.8814
126	0.0131	498.48	1.8864	136	0.0105	504.97	1.8874
128	0.0132	500.82	1.8922	138	0.0106	507.41	1.8933
130	0.0134	503.16	1.8980	140	0.0107	509.84	1.8992
132	0.0135	505.50	1.9038	142	0.0108	512.27	1.9051
134	0.0136	507.84	1.9096	144	0.0109	514.70	1.9109
136	0.0137	510.18	1.9153	146	0.0110	517.12	1.9167
138	0.0138	512.51	1.9210	148	0.0110	519.54	1.9225
140	0.0139	514.85	1.9267	150	0.0111	521.96	1.9282
142	0.0140	517.18	1.9323	152	0.0112	524.38	1.9339
144	0.0142	519.52	1.9379	154	0.0113	526.79	1.9396
146	0.0143	521.85	1.9435	156	0.0114	529.21	1.9452
148	0.0144	524.19	1.9491	158	0.0115	531.62	1.9508
150	0.0145	526.52	1.9546	160	0.0116	534.03	1.9564
152	0.0146	528.86	1.9601	162	0.0117	536.44	1.9620
154	0.0147	531.20	1.9656	164	0.0118	538.86	1.9675
156	0.0148	533.54	1.9711	166	0.0119	541.27	1.9730
158	0.0149	535.88	1.9765	168	0.0120	543.68	1.9785
160	0.0150	538.22	1.9819	170	0.0121	546.10	1.9840
162	0.0151	540.57	1.9873	172	0.0122	548.51	1.9894
164	0.0152	542.92	1.9927	174	0.0122	550.92	1.9948
166	0.0153	545.27	1.9981	176	0.0123	553.34	2.0002
168	0.0154	547.62	2.0034	178	0.0124	555.76	2.0056
170	0.0155	549.97	2.0087	180	0.0125	558.18	2.0109
172	0.0156	552.33	2.0140	182	0.0126	560.60	2.0162
174	0.0158	554.68	2.0193	184	0.0127	563.02	2.0216
176	0.0159	557.05	2.0246	186	0.0128	565.44	2.0268
178	0.0160	559.41	2.0298	188	0.0128	567.87	2.0321
180	0.0161	561.78	2.0351	190	0.0129	570.30	2.0374
182	0.0162	564.15	2.0403	192	0.0130	572.73	2.0426
184	0.0163	566.52	2.0455	194	0.0131	575.16	2.0478
186	0.0164	568.90	2.0507	196	0.0132	577.60	2.0530
188	0.0165	571.28	2.0559	198	0.0133	580.04	2.0582
190	0.0166	573.66	2.0610	200	0.0133	582.48	2.0634
192	0.0167	576.04	2.0662	202	0.0134	584.92	2.0685
194	0.0168	578.43	2.0713	204	0.0135	587.37	2.0737
196	0.0169	580.83	2.0764	206	0.0136	589.82	2.0788
198	0.0169	583.22	2.0815	208	0.0137	592.27	2.0839
200	0.0170	585.62	2.0866	210	0.0137	594.72	2.0890
202	0.0171	588.03	2.0916	212	0.0138	597.18	2.0941
204	0.0172	590.43	2.0967	214	0.0139	599.65	2.0991
206	0.0173	592.85	2.1017	216	0.0140	602.11	2.1042
208	0.0174	595.26	2.1068	218	0.0141	604.58	2.1092
210	0.0175	597.68	2.1118	220	0.0141	607.05	2.1143
212	0.0176	600.10	2.1168	222	0.0142	609.53	2.1193
214	0.0177	602.53	2.1218	224	0.0143	612.01	2.1243
216	0.0178	604.96	2.1268	226	0.0144	614.49	2.1292
218	0.0179	607.40	2.1317	228	0.0145	616.97	2.1342
220	0.0180	609.84	2.1367	230	0.0145	619.46	2.1392



sat 90 [32.156 bar]			
Temp [C]	Volume [m ³ /kg]	Enthalpy [kJ/kg]	Entropy [kJ/K-kg]
90	0.0047	425.17	1.6665
92	0.0050	430.39	1.6808
94	0.0052	434.90	1.6931
96	0.0054	438.99	1.7043
98	0.0056	442.66	1.7142
100	0.0058	446.37	1.7241
102	0.0059	449.80	1.7333
104	0.0061	453.09	1.7421
106	0.0062	456.28	1.7505
108	0.0064	459.38	1.7586
110	0.0065	462.41	1.7666
112	0.0066	465.37	1.7743
114	0.0068	468.29	1.7818
116	0.0069	471.15	1.7892
118	0.0070	473.98	1.7965
120	0.0071	476.77	1.8036
122	0.0072	479.53	1.8106
124	0.0073	482.25	1.8175
126	0.0074	484.96	1.8242
128	0.0075	487.64	1.8309
130	0.0076	490.30	1.8376
132	0.0077	492.94	1.8441
134	0.0078	495.57	1.8506
136	0.0079	498.18	1.8570
138	0.0080	500.78	1.8633
140	0.0081	503.36	1.8696
142	0.0082	505.93	1.8758
144	0.0083	508.50	1.8819
146	0.0084	511.05	1.8881
148	0.0085	513.60	1.8941
150	0.0085	516.14	1.9001
152	0.0086	518.67	1.9061
154	0.0087	521.20	1.9120
156	0.0088	523.72	1.9179
158	0.0089	526.23	1.9238
160	0.0090	528.74	1.9296
162	0.0090	531.25	1.9353
164	0.0091	533.75	1.9411
166	0.0092	536.25	1.9468
168	0.0093	538.75	1.9525
170	0.0094	541.25	1.9581
172	0.0094	543.74	1.9637
174	0.0095	546.24	1.9693
176	0.0096	548.73	1.9749
178	0.0097	551.22	1.9804
180	0.0097	553.71	1.9859
182	0.0098	556.20	1.9914
184	0.0099	558.68	1.9968
186	0.0100	561.17	2.0023
188	0.0100	563.66	2.0077
190	0.0101	566.15	2.0131
192	0.0102	568.64	2.0184
194	0.0103	571.13	2.0238
196	0.0103	573.62	2.0291
198	0.0104	576.12	2.0344
200	0.0105	578.61	2.0397
202	0.0106	581.11	2.0450
204	0.0106	583.61	2.0502
206	0.0107	586.10	2.0554
208	0.0108	588.61	2.0606
210	0.0108	591.11	2.0658
212	0.0109	593.61	2.0710
214	0.0110	596.12	2.0762
216	0.0110	598.63	2.0813
218	0.0111	601.14	2.0864
220	0.0112	603.66	2.0915
222	0.0112	606.17	2.0966
224	0.0113	608.69	2.1017
226	0.0114	611.21	2.1068
228	0.0114	613.74	2.1118
230	0.0115	616.27	2.1169
232	0.0116	618.80	2.1219
234	0.0116	621.33	2.1269
236	0.0117	623.87	2.1319
238	0.0118	626.41	2.1368
240	0.0118	628.95	2.1418



Temp [C]	Pressure (L) [bar] bubble	Pressure (V) [bar] dew	Volume (L) [litre/kg]bubble	Volume (V) [litre/kg]	Density (L) [kg/m^3]	Density (V) [kg/m^3]	Enthalpy (L) [kJ/kg] bubble	Latent heat kJ/kg	Enthalpy (V) [kJ/kg] dew	Entropy (L) [kJ/K-kg]	Entropy (V) [kJ/K-kg]
-50	0.343	0.259	0.781	686.33	1420.8	1.5	135.43	228.58	364.01	0.7401	1.7783
-48	0.383	0.292	0.780	613.43	1415.2	1.6	137.91	227.40	365.31	0.7512	1.7745
-46	0.427	0.328	0.780	549.66	1409.6	1.8	140.41	226.21	366.62	0.7622	1.7710
-44	0.475	0.368	0.781	493.70	1404.0	2.0	142.91	225.01	367.92	0.7731	1.7676
-42	0.528	0.412	0.781	444.47	1398.3	2.3	145.42	223.80	369.22	0.7840	1.7644
-40	0.585	0.460	0.782	401.04	1392.6	2.5	147.93	222.60	370.53	0.7948	1.7613
-38	0.647	0.512	0.783	362.64	1386.9	2.8	150.45	221.38	371.83	0.8056	1.7584
-36	0.713	0.568	0.784	328.59	1381.2	3.0	152.98	220.15	373.13	0.8163	1.7556
-34	0.786	0.630	0.785	298.33	1375.4	3.4	155.52	218.91	374.43	0.8269	1.7530
-32	0.864	0.697	0.786	271.38	1369.6	3.7	158.07	217.66	375.73	0.8375	1.7505
-30	0.948	0.769	0.787	247.31	1363.7	4.0	160.62	216.40	377.02	0.8480	1.7481
-28	1.039	0.847	0.789	225.79	1357.8	4.4	163.18	215.13	378.31	0.8585	1.7458
-26	1.136	0.932	0.791	206.49	1351.9	4.8	165.75	213.85	379.60	0.8689	1.7437
-24	1.240	1.023	0.792	189.16	1346.0	5.3	168.33	212.56	380.89	0.8793	1.7416
-22	1.352	1.120	0.794	173.56	1340.0	5.8	170.92	211.25	382.17	0.8896	1.7397
-20	1.472	1.225	0.796	159.49	1334.0	6.3	173.51	209.94	383.45	0.8998	1.7378
-18	1.599	1.338	0.798	146.78	1327.9	6.8	176.12	208.60	384.72	0.9100	1.7361
-16	1.735	1.458	0.801	135.27	1321.8	7.4	178.73	207.26	385.99	0.9202	1.7344
-14	1.880	1.587	0.803	124.85	1315.6	8.0	181.35	205.90	387.25	0.9303	1.7328
-12	2.035	1.724	0.805	115.37	1309.4	8.7	183.99	204.52	388.51	0.9404	1.7313
-10	2.198	1.871	0.808	106.76	1303.2	9.4	186.63	203.13	389.76	0.9504	1.7299
-8	2.372	2.027	0.810	98.91	1296.9	10.1	189.28	201.73	391.01	0.9604	1.7285
-6	2.557	2.193	0.813	91.75	1290.5	10.9	191.95	200.30	392.25	0.9704	1.7272
-4	2.752	2.369	0.816	85.21	1284.1	11.7	194.62	198.86	393.48	0.9803	1.7260
-2	2.958	2.556	0.819	79.22	1277.7	12.6	197.30	197.40	394.70	0.9902	1.7249



Temp [C]	Pressure (L) [bar] bubble	Pressure (V) [bar] dew	Volume (L) [litre/kg]bubble	Volume (V) [litre/kg]	Density (L) [kg/m ³]	Density (V) [kg/m ³]	Enthalpy (L) [kJ/kg] bubble	Latent heat kJ/kg	Enthalpy (V) [kJ/kg] dew	Entropy (L) [kJ/K-kg]	Entropy (V) [kJ/K-kg]
0	3.176	2.754	0.822	73.73	1271.2	13.6	200.00	195.92	395.92	1.0000	1.7238
2	3.407	2.964	0.825	68.69	1264.6	14.6	202.71	194.42	397.13	1.0098	1.7227
4	3.649	3.186	0.828	64.06	1258.0	15.6	205.43	192.90	398.33	1.0196	1.7217
6	3.905	3.421	0.831	59.80	1251.3	16.7	208.16	191.36	399.52	1.0293	1.7208
8	4.175	3.668	0.835	55.88	1244.5	17.9	210.90	189.80	400.70	1.0390	1.7199
10	4.458	3.929	0.838	52.26	1237.7	19.1	213.65	188.22	401.87	1.0487	1.7191
12	4.755	4.204	0.842	48.91	1230.8	20.4	216.42	186.61	403.03	1.0584	1.7182
14	5.068	4.494	0.845	45.82	1223.8	21.8	219.20	184.98	404.18	1.0680	1.7175
16	5.395	4.798	0.849	42.96	1216.8	23.3	222.00	183.31	405.31	1.0776	1.7167
18	5.739	5.118	0.853	40.30	1209.6	24.8	224.81	181.62	406.43	1.0872	1.7160
20	6.098	5.454	0.857	37.84	1202.4	26.4	227.63	179.92	407.55	1.0968	1.7153
22	6.475	5.807	0.862	35.55	1195.1	28.1	230.47	178.17	408.64	1.1063	1.7146
24	6.868	6.176	0.866	33.42	1187.7	29.9	233.32	176.40	409.72	1.1158	1.7140
26	7.280	6.563	0.870	31.44	1180.1	31.8	236.19	174.60	410.79	1.1253	1.7134
28	7.709	6.968	0.875	29.59	1172.5	33.8	239.08	172.76	411.84	1.1348	1.7128
30	8.158	7.392	0.880	27.87	1164.8	35.9	241.98	170.89	412.87	1.1443	1.7122
32	8.625	7.835	0.885	26.26	1157.0	38.1	244.91	168.98	413.89	1.1538	1.7116
34	9.113	8.297	0.890	24.76	1149.0	40.4	247.85	167.04	414.89	1.1633	1.7110
36	9.620	8.781	0.895	23.35	1140.9	42.8	250.81	165.06	415.87	1.1727	1.7104
38	10.149	9.285	0.901	22.04	1132.7	45.4	253.78	163.04	416.82	1.1822	1.7098
40	10.699	9.810	0.907	20.80	1124.3	48.1	256.78	160.98	417.76	1.1916	1.7091
42	11.271	10.358	0.912	19.64	1115.8	50.9	259.81	158.86	418.67	1.2011	1.7085
44	11.865	10.928	0.919	18.55	1107.1	53.9	262.85	156.70	419.55	1.2105	1.7079
46	12.483	11.522	0.925	17.53	1098.3	57.0	265.92	154.49	420.41	1.2200	1.7072
48	13.124	12.140	0.932	16.57	1089.3	60.4	269.01	152.24	421.25	1.2295	1.7065



Temp [C]	Pressure (L) [bar] bubble	Pressure (V) [bar] dew	Volume (L) [litre/kg]bubble	Volume (V) [litre/kg]	Density (L) [kg/m^3]	Density (V) [kg/m^3]	Enthalpy (L) [kJ/kg] bubble	Latent heat kJ/kg	Enthalpy (V) [kJ/kg] dew	Entropy (L) [kJ/K-kg]	Entropy (V) [kJ/K-kg]
50	13.790	12.783	0.939	15.66	1080.1	63.9	272.13	149.92	422.05	1.2390	1.7058
52	14.480	13.452	0.946	14.81	1070.6	67.5	275.27	147.55	422.82	1.2485	1.7050
54	15.196	14.146	0.953	14.00	1061.0	71.4	278.45	145.11	423.56	1.2580	1.7042
56	15.938	14.867	0.961	13.24	1051.2	75.5	281.65	142.61	424.26	1.2676	1.7034
58	16.706	15.617	0.969	12.52	1041.1	79.9	284.89	140.03	424.92	1.2771	1.7025
60	17.502	16.394	0.978	11.84	1030.7	84.5	288.16	137.38	425.54	1.2867	1.7015
62	18.326	17.201	0.987	11.19	1020.0	89.4	291.46	134.65	426.11	1.2964	1.7004
64	19.179	18.038	0.997	10.58	1009.0	94.5	294.81	131.82	426.63	1.3061	1.6993
66	20.062	18.906	1.007	10.00	997.7	100.0	298.20	128.90	427.10	1.3159	1.6980
68	20.974	19.806	1.018	9.44	986.0	105.9	301.63	125.88	427.51	1.3257	1.6966
70	21.918	20.738	1.029	8.92	973.9	112.1	305.11	122.75	427.86	1.3356	1.6951
72	22.893	21.705	1.041	8.42	961.4	118.8	308.65	119.48	428.13	1.3456	1.6935
74	23.900	22.707	1.054	7.94	948.3	126.0	312.24	116.08	428.32	1.3556	1.6917
76	24.941	23.745	1.068	7.48	934.7	133.7	315.91	112.52	428.43	1.3658	1.6897
78	26.017	24.820	1.083	7.04	920.4	142.0	319.64	108.79	428.43	1.3762	1.6875
80	27.127	25.935	1.100	6.62	905.3	151.0	323.46	104.86	428.32	1.3867	1.6850
82	28.274	27.090	1.118	6.22	889.4	160.9	327.37	100.70	428.07	1.3974	1.6822
84	29.458	28.288	1.138	5.82	872.4	171.7	331.40	96.27	427.67	1.4083	1.6791
86	30.679	29.529	1.160	5.45	854.2	183.6	335.56	91.52	427.08	1.4195	1.6755
88	31.940	30.818	1.185	5.08	834.5	197.0	339.88	86.39	426.27	1.4311	1.6713
90	33.242	32.156	1.214	4.71	812.7	212.2	344.41	80.76	425.17	1.4432	1.6665