

temperature [°C]	pressure [bar]		density [kg/m³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
	liquid	vapour	liquid	vapour	liquid	vapour	liquid	vapour
-40,0	0,453	0,444	1026,6	1,681	76,59	392,95	0,5018	1,8598
-39,0	0,476	0,468	1024,7	1,763	78,22	393,82	0,5088	1,8577
-38,0	0,501	0,492	1022,8	1,849	79,86	394,69	0,5158	1,8557
-37,0	0,527	0,518	1020,9	1,938	81,49	395,57	0,5227	1,8537
-36,0	0,553	0,544	1019,0	2,030	83,13	396,44	0,5296	1,8517
-35,0	0,581	0,572	1017,1	2,125	84,77	397,31	0,5365	1,8498
-34,0	0,610	0,600	1015,2	2,225	86,42	398,18	0,5434	1,8480
-33,0	0,640	0,630	1013,3	2,327	88,06	399,05	0,5502	1,8461
-32,0	0,671	0,661	1011,4	2,434	89,71	399,92	0,5571	1,8443
-31,0	0,704	0,693	1009,5	2,544	91,36	400,79	0,5639	1,8426
-30,0	0,737	0,726	1007,6	2,658	93,01	401,66	0,5707	1,8409
-29,0	0,772	0,761	1005,7	2,776	94,66	402,53	0,5774	1,8392
-28,0	0,808	0,797	1003,7	2,898	96,31	403,39	0,5842	1,8376
-27,0	0,846	0,834	1001,8	3,025	97,97	404,26	0,5909	1,8360
-26,0	0,885	0,873	999,85	3,155	99,63	405,12	0,5976	1,8345
-25,0	0,925	0,912	997,91	3,290	101,29	405,99	0,6043	1,8329
-24,0	0,967	0,954	995,96	3,429	102,95	406,85	0,6110	1,8315
-23,0	1,010	0,997	994,00	3,573	104,61	407,71	0,6176	1,8300
-22,0	1,054	1,041	992,05	3,722	106,28	408,57	0,6242	1,8286
-21,0	1,101	1,087	990,08	3,876	107,95	409,43	0,6308	1,8272
-20,0	1,148	1,134	988,11	4,034	109,62	410,29	0,6374	1,8258
-19,0	1,198	1,184	986,14	4,197	111,29	411,14	0,6440	1,8245
-18,0	1,249	1,234	984,16	4,366	112,97	412,00	0,6506	1,8232
-17,0	1,302	1,287	982,17	4,539	114,65	412,85	0,6571	1,8220
-16,0	1,356	1,341	980,18	4,718	116,33	413,71	0,6636	1,8207
-15,0	1,412	1,397	978,19	4,903	118,01	414,56	0,6702	1,8195
-14,0	1,470	1,454	976,19	5,093	119,69	415,41	0,6766	1,8183
-13,0	1,530	1,514	974,18	5,289	121,38	416,26	0,6831	1,8172
-12,0	1,592	1,575	972,16	5,490	123,07	417,11	0,6896	1,8161
-11,0	1,655	1,639	970,14	5,698	124,76	417,95	0,6960	1,8150
-10,0	1,721	1,704	968,12	5,911	126,46	418,80	0,7024	1,8139
-9,0	1,789	1,771	966,09	6,131	128,16	419,64	0,7089	1,8129
-8,0	1,858	1,840	964,05	6,357	129,86	420,48	0,7153	1,8119
-7,0	1,930	1,912	962,00	6,589	131,56	421,32	0,7216	1,8109
-6,0	2,004	1,985	959,95	6,828	133,26	422,16	0,7280	1,8099
-5,0	2,080	2,061	957,89	7,074	134,97	422,99	0,7344	1,8090
-4,0	2,158	2,139	955,82	7,326	136,68	423,83	0,7407	1,8080
-3,0	2,238	2,219	953,75	7,586	138,40	424,66	0,7470	1,8071
-2,0	2,321	2,301	951,67	7,853	140,11	425,49	0,7533	1,8063
-1,0	2,406	2,386	949,59	8,126	141,83	426,32	0,7596	1,8054
0,0	2,494	2,473	947,49	8,408	143,55	427,14	0,7659	1,8046

temperature [°C]	pressure [bar]		density [kg/m³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
	liquid	vapour	liquid	vapour	liquid	vapour	liquid	vapour
1,0	2,583	2,563	945,39	8,697	145,28	427,97	0,7722	1,8038
2,0	2,676	2,655	943,28	8,993	147,01	428,79	0,7784	1,8030
3,0	2,770	2,749	941,17	9,297	148,74	429,61	0,7847	1,8022
4,0	2,868	2,846	939,04	9,610	150,47	430,43	0,7909	1,8014
5,0	2,968	2,946	936,91	9,930	152,21	431,24	0,7971	1,8007
6,0	3,070	3,048	934,77	10,26	153,95	432,06	0,8033	1,8000
7,0	3,176	3,153	932,62	10,60	155,69	432,87	0,8095	1,7993
8,0	3,284	3,261	930,47	10,94	157,44	433,68	0,8157	1,7986
9,0	3,394	3,371	928,30	11,30	159,19	434,48	0,8219	1,7979
10,0	3,508	3,484	926,13	11,66	160,94	435,29	0,8280	1,7973
11,0	3,624	3,600	923,95	12,03	162,69	436,09	0,8342	1,7967
12,0	3,744	3,720	921,76	12,42	164,45	436,89	0,8403	1,7960
13,0	3,866	3,842	919,56	12,81	166,22	437,68	0,8464	1,7954
14,0	3,991	3,967	917,35	13,21	167,98	438,47	0,8525	1,7949
15,0	4,120	4,095	915,13	13,62	169,75	439,26	0,8586	1,7943
16,0	4,251	4,226	912,90	14,04	171,53	440,05	0,8647	1,7937
17,0	4,386	4,360	910,67	14,47	173,30	440,84	0,8708	1,7932
18,0	4,524	4,498	908,42	14,92	175,08	441,62	0,8769	1,7927
19,0	4,665	4,638	906,16	15,37	176,87	442,40	0,8830	1,7921
20,0	4,809	4,782	903,90	15,83	178,65	443,17	0,8890	1,7916
21,0	4,957	4,930	901,62	16,31	180,45	443,94	0,8951	1,7911
22,0	5,108	5,081	899,33	16,79	182,24	444,71	0,9011	1,7906
23,0	5,262	5,235	897,03	17,29	184,04	445,48	0,9071	1,7902
24,0	5,420	5,392	894,72	17,80	185,84	446,24	0,9131	1,7897
25,0	5,582	5,554	892,40	18,32	187,65	447,00	0,9191	1,7893
26,0	5,747	5,719	890,07	18,85	189,46	447,75	0,9252	1,7888
27,0	5,915	5,887	887,73	19,40	191,28	448,50	0,9311	1,7884
28,0	6,088	6,059	885,37	19,96	193,10	449,25	0,9371	1,7880
29,0	6,264	6,235	883,01	20,53	194,92	449,99	0,9431	1,7875
30,0	6,444	6,415	880,63	21,12	196,75	450,73	0,9491	1,7871
31,0	6,628	6,598	878,23	21,72	198,58	451,47	0,9551	1,7867
32,0	6,815	6,786	875,83	22,33	200,42	452,20	0,9610	1,7863
33,0	7,007	6,977	873,41	22,96	202,26	452,93	0,9670	1,7860
34,0	7,203	7,173	870,98	23,60	204,11	453,65	0,9729	1,7856
35,0	7,402	7,372	868,53	24,25	205,96	454,37	0,9789	1,7852
36,0	7,606	7,576	866,07	24,92	207,81	455,08	0,9848	1,7848
37,0	7,814	7,783	863,60	25,61	209,67	455,79	0,9907	1,7845
38,0	8,026	7,995	861,11	26,31	211,54	456,50	0,9966	1,7841
39,0	8,243	8,212	858,61	27,03	213,41	457,20	1,0026	1,7838
40,0	8,463	8,432	856,09	27,76	215,28	457,89	1,0085	1,7834

temperature [°C]	pressure [bar]		density [kg/m³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
	liquid	vapour	liquid	vapour	liquid	vapour	liquid	vapour
41,0	8,688	8,657	853,56	28,51	217,16	458,58	1,0144	1,7831
42,0	8,918	8,886	851,01	29,28	219,05	459,27	1,0203	1,7827
43,0	9,152	9,120	848,44	30,07	220,94	459,95	1,0262	1,7824
44,0	9,390	9,359	845,86	30,87	222,83	460,62	1,0321	1,7820
45,0	9,633	9,602	843,25	31,69	224,74	461,29	1,0380	1,7817
46,0	9,881	9,849	840,64	32,53	226,64	461,95	1,0439	1,7813
47,0	10,13	10,10	838,00	33,39	228,56	462,61	1,0498	1,7810
48,0	10,39	10,36	835,34	34,27	230,47	463,26	1,0557	1,7807
49,0	10,65	10,62	832,67	35,17	232,40	463,90	1,0615	1,7803
50,0	10,92	10,89	829,98	36,09	234,33	464,54	1,0674	1,7800
51,0	11,19	11,16	827,26	37,03	236,27	465,17	1,0733	1,7796
52,0	11,47	11,44	824,53	38,00	238,21	465,80	1,0792	1,7793
53,0	11,75	11,72	821,77	38,98	240,16	466,41	1,0851	1,7789
54,0	12,04	12,00	818,99	39,99	242,11	467,02	1,0909	1,7786
55,0	12,33	12,30	816,19	41,02	244,07	467,62	1,0968	1,7782
56,0	12,63	12,59	813,37	42,07	246,04	468,22	1,1027	1,7778
57,0	12,93	12,90	810,53	43,15	248,02	468,81	1,1086	1,7775
58,0	13,24	13,21	807,65	44,26	250,00	469,39	1,1145	1,7771
59,0	13,55	13,52	804,76	45,39	251,99	469,96	1,1203	1,7767
60,0	13,87	13,84	801,84	46,55	253,99	470,52	1,1262	1,7763
61,0	14,19	14,16	798,89	47,73	255,99	471,07	1,1321	1,7759
62,0	14,52	14,49	795,91	48,94	258,00	471,62	1,1380	1,7755
63,0	14,86	14,83	792,91	50,18	260,02	472,15	1,1439	1,7750
64,0	15,20	15,17	789,88	51,46	262,05	472,68	1,1498	1,7746
65,0	15,55	15,52	786,82	52,76	264,09	473,19	1,1557	1,7742
66,0	15,90	15,87	783,72	54,09	266,13	473,70	1,1616	1,7737
67,0	16,26	16,23	780,60	55,46	268,18	474,19	1,1675	1,7732
68,0	16,63	16,59	777,44	56,86	270,24	474,67	1,1734	1,7727
69,0	17,00	16,97	774,25	58,29	272,31	475,15	1,1793	1,7722
70,0	17,37	17,34	771,02	59,77	274,39	475,61	1,1853	1,7717
71,0	17,76	17,73	767,76	61,27	276,48	476,05	1,1912	1,7712
72,0	18,15	18,12	764,45	62,82	278,58	476,49	1,1971	1,7706
73,0	18,54	18,51	761,11	64,41	280,69	476,91	1,2031	1,7700
74,0	18,95	18,91	757,73	66,04	282,81	477,32	1,2090	1,7694
75,0	19,35	19,32	754,31	67,71	284,94	477,72	1,2150	1,7688
76,0	19,77	19,74	750,84	69,42	287,08	478,10	1,2210	1,7682
77,0	20,19	20,16	747,32	71,18	289,23	478,46	1,2270	1,7675
78,0	20,62	20,59	743,76	72,99	291,39	478,81	1,2330	1,7668
79,0	21,06	21,03	740,15	74,85	293,57	479,15	1,2390	1,7661
80,0	21,50	21,47	736,48	76,76	295,76	479,46	1,2450	1,7653

temperature [°C]	pressure [bar]		density [kg/m³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
	liquid	vapour	liquid	vapour	liquid	vapour	liquid	vapour
81,0	21,95	21,92	732,77	78,73	297,96	479,76	1,2511	1,7645
82,0	22,41	22,38	728,99	80,75	300,18	480,04	1,2572	1,7637
83,0	22,87	22,84	725,16	82,83	302,40	480,30	1,2633	1,7628
84,0	23,34	23,31	721,26	84,98	304,65	480,55	1,2694	1,7619
85,0	23,82	23,79	717,30	87,18	306,91	480,77	1,2755	1,7610
86,0	24,30	24,28	713,27	89,46	309,18	480,96	1,2816	1,7600
87,0	24,80	24,77	709,17	91,81	311,47	481,14	1,2878	1,7590
88,0	25,30	25,27	704,99	94,23	313,78	481,29	1,2940	1,7579
89,0	25,81	25,78	700,74	96,73	316,11	481,41	1,3003	1,7568
90,0	26,32	26,30	696,39	99,31	318,45	481,51	1,3065	1,7556
91,0	26,85	26,82	691,96	102,0	320,82	481,58	1,3128	1,7543
92,0	27,38	27,36	687,44	104,8	323,21	481,62	1,3192	1,7530
93,0	27,92	27,90	682,81	107,6	325,62	481,63	1,3255	1,7517
94,0	28,47	28,45	678,08	110,6	328,05	481,60	1,3320	1,7502
95,0	29,03	29,00	673,23	113,7	330,51	481,54	1,3384	1,7487
96,0	29,59	29,57	668,26	116,9	332,99	481,43	1,3449	1,7471
97,0	30,17	30,14	663,16	120,2	335,50	481,29	1,3515	1,7454
98,0	30,75	30,73	657,91	123,7	338,05	481,10	1,3581	1,7436
99,0	31,34	31,32	652,51	127,3	340,62	480,87	1,3648	1,7417
100,0	31,94	31,92	646,95	131,1	343,23	480,58	1,3716	1,7397
101,0	32,55	32,53	641,21	135,1	345,88	480,24	1,3784	1,7375
102,0	33,17	33,15	635,27	139,2	348,57	479,83	1,3853	1,7352
103,0	33,80	33,78	629,11	143,6	351,30	479,36	1,3923	1,7328
104,0	34,44	34,42	622,72	148,2	354,09	478,82	1,3994	1,7302
105,0	35,09	35,07	616,06	153,1	356,93	478,19	1,4067	1,7274
106,0	35,74	35,73	609,10	158,3	359,82	477,48	1,4140	1,7244
107,0	36,41	36,40	601,81	163,8	362,79	476,66	1,4216	1,7211
108,0	37,09	37,08	594,15	169,6	365,83	475,73	1,4293	1,7176
109,0	37,78	37,77	586,05	175,9	368,96	474,67	1,4372	1,7138
110,0	38,48	38,47	577,44	182,7	372,19	473,46	1,4453	1,7096
111,0	39,19	39,18	568,24	190,1	375,55	472,08	1,4537	1,7050
112,0	39,92	39,91	558,31	198,3	379,04	470,48	1,4625	1,6999
113,0	40,65	40,64	547,50	207,3	382,72	468,62	1,4716	1,6941
114,0	41,40	41,39	535,54	217,4	386,62	466,44	1,4814	1,6876
115,0	42,16	42,15	522,06	229,1	390,82	463,82	1,4919	1,6799

Saturated Pressure Table

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temperature [°C]	pressure [bar]		density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
	liquid	vapour	liquid	vapour	liquid	vapour	liquid	vapour
116,0	42,94	42,93	506,40	242,9	395,47	460,59	1,5034	1,6708
117,0	43,72	43,72	487,23	260,3	400,83	456,40	1,5168	1,6592
118,0	44,53	44,52	461,09	284,6	407,62	450,33	1,5337	1,6429
119,0	45,35	45,35	405,24	338,7	420,81	436,62	1,5669	1,6072

Calculated by Refprop version 10.0

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