

Massey University
280.271 Heat and Mass Transfer 1
STEAM TABLES

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1 Introduction

These steam tables were generated using the REFPROP 9.0 property program published by NIST.¹

1.1 Quantities

QUANTITY	UNITS	SYMBOL
Pressure (absolute)	MPa	<i>P</i>
Temperature	°C	<i>θ</i>
Specific volume	m ³ /Mg	<i>v</i>
Specific internal energy	kJ/kg	<i>u</i>
Specific enthalpy	kJ/kg	<i>h</i>
Specific entropy	kJ/(kgK)	<i>s</i>
Specific heat capacity	kJ/(kgK)	<i>c_p</i>
Viscosity	μPa s	<i>μ</i>
Thermal conductivity	mW/(mK)	<i>λ</i>

¹Lemmon, E.W., Huber, M.L., McLinden, M.O. *NIST Standard Reference Database 23: Reference Fluid Thermo-dynamic and Transport Properties-REFPROP*, Version 8.0, National Institute of Standards and Technology, Standard Reference Data Program, Gaithersburg, 2007.

2 Viscosity and Saturated Data

θ °C	P_{sat} MPa	$c_{p,l}$ kJ/(kgK)	$c_{p,v}$	μ_l μ Pa s	μ_v	λ_l mW/(Km)	λ_v
0.010	0.00061	4.220	1.884	1791	8.946	561.0	17.07
2.000	0.00071	4.213	1.886	1674	9.003	564.8	17.18
4.000	0.00081	4.208	1.888	1567	9.061	568.6	17.28
6.000	0.00094	4.203	1.890	1472	9.120	572.4	17.39
8.000	0.0011	4.199	1.893	1385	9.179	576.2	17.51
10.00	0.0012	4.196	1.895	1306	9.238	580.0	17.62
12.00	0.0014	4.193	1.897	1234	9.299	583.8	17.74
14.00	0.0016	4.190	1.899	1168	9.359	587.5	17.86
16.00	0.0018	4.188	1.901	1108	9.420	591.2	17.98
18.00	0.0021	4.186	1.904	1053	9.482	594.8	18.10
20.00	0.0023	4.184	1.906	1002	9.544	598.4	18.23
22.00	0.0026	4.183	1.908	954.4	9.607	602.0	18.35
24.00	0.0030	4.182	1.911	910.7	9.669	605.4	18.48
26.00	0.0034	4.181	1.913	870.1	9.733	608.8	18.62
28.00	0.0038	4.181	1.916	832.4	9.796	612.2	18.75
30.00	0.0042	4.180	1.918	797.2	9.860	615.5	18.89
32.00	0.0048	4.180	1.921	764.4	9.924	618.6	19.02
34.00	0.0053	4.180	1.923	733.7	9.989	621.8	19.16
36.00	0.0059	4.179	1.926	705.0	10.05	624.8	19.31
38.00	0.0066	4.180	1.929	678.0	10.12	627.7	19.45
40.00	0.0074	4.180	1.931	652.7	10.18	630.6	19.60
45.00	0.0096	4.180	1.939	595.8	10.35	637.3	19.97
50.00	0.012	4.182	1.947	546.5	10.52	643.6	20.36
55.00	0.016	4.183	1.955	503.6	10.68	649.2	20.77
60.00	0.020	4.185	1.965	466.0	10.85	654.3	21.19
65.00	0.025	4.187	1.975	432.9	11.02	659.0	21.62
70.00	0.031	4.190	1.986	403.5	11.19	663.1	22.07
75.00	0.039	4.193	1.999	377.4	11.37	666.8	22.53
80.00	0.047	4.197	2.012	354.0	11.54	670.0	23.01
85.00	0.058	4.201	2.027	333.1	11.71	672.8	23.51
90.00	0.070	4.205	2.043	314.2	11.89	675.3	24.02
95.00	0.085	4.210	2.061	297.1	12.06	677.3	24.55
100.0	0.101	4.216	2.080	281.6	12.23	679.1	25.10
110.0	0.143	4.228	2.124	254.6	12.58	681.7	26.25
120.0	0.199	4.244	2.177	232.0	12.93	683.2	27.47
130.0	0.270	4.261	2.239	212.9	13.27	683.7	28.77
140.0	0.362	4.283	2.311	196.6	13.62	683.3	30.14
150.0	0.476	4.307	2.394	182.6	13.96	682.0	31.60
160.0	0.618	4.335	2.488	170.4	14.30	680.0	33.14
170.0	0.792	4.368	2.594	159.8	14.64	677.1	34.76
180.0	1.003	4.405	2.713	150.4	14.99	673.3	36.47
190.0	1.255	4.447	2.844	142.0	15.33	668.8	38.27
200.0	1.555	4.496	2.990	134.6	15.67	663.3	40.17
210.0	1.908	4.551	3.150	127.9	16.01	657.0	42.18
220.0	2.320	4.615	3.329	121.8	16.35	649.7	44.31
230.0	2.797	4.688	3.528	116.2	16.70	641.3	46.59
240.0	3.347	4.772	3.754	111.1	17.06	631.9	49.06
250.0	3.976	4.870	4.011	106.3	17.43	621.3	51.77
260.0	4.692	4.986	4.308	101.8	17.81	609.4	54.79
270.0	5.503	5.123	4.656	97.59	18.21	596.3	58.25
280.0	6.417	5.289	5.073	93.55	18.63	582.1	62.32
290.0	7.442	5.493	5.582	89.66	19.08	566.7	67.26
300.0	8.588	5.750	6.220	85.86	19.58	550.8	73.48
310.0	9.865	6.085	7.045	82.09	20.13	534.8	81.60
320.0	11.28	6.537	8.159	78.31	20.77	519.7	92.65
330.0	12.86	7.186	9.753	74.43	21.53	506.3	108.4
340.0	14.60	8.208	12.24	70.33	22.48	495.5	131.9
350.0	16.53	10.12	16.69	65.80	23.74	488.1	170.1
360.0	18.67	15.00	27.36	60.29	25.64	487.0	242.0
370.0	21.04	45.16	96.60	52.05	29.57	539.7	478.5

3 Saturated Data

P	θ_{sat}	v_l	v_v	u_l	u_v	h_l	$\Delta(h_{vap})$	h_v	s_l	s_v
MPa	°C	m ³ /Mg		kJ/kg		kJ/kg		kJ/kg		kJ/(kgK)
0.0010	6.970	1.000	129178	29.30	2384	29.30	2484	2514	0.106	8.975
0.0015	13.02	1.001	87959	54.68	2393	54.68	2470	2525	0.196	8.827
0.0020	17.49	1.001	66987	73.43	2399	73.43	2459	2533	0.261	8.723
0.0025	21.08	1.002	54240	88.42	2404	88.42	2451	2539	0.312	8.642
0.0030	24.08	1.003	45653	101.0	2408	101.0	2444	2545	0.354	8.576
0.0035	26.67	1.003	39466	111.8	2411	111.8	2438	2550	0.391	8.521
0.0040	28.96	1.004	34791	121.4	2415	121.4	2432	2554	0.422	8.473
0.0045	31.01	1.005	31131	130.0	2417	130.0	2427	2557	0.451	8.431
0.0050	32.87	1.005	28185	137.7	2420	137.7	2423	2561	0.476	8.394
0.0060	36.16	1.006	23733	151.5	2424	151.5	2415	2567	0.521	8.329
0.0070	39.00	1.008	20524	163.3	2428	163.4	2408	2572	0.559	8.274
0.0080	41.51	1.008	18099	173.8	2431	173.8	2402	2576	0.592	8.227
0.0090	43.76	1.009	16199	183.2	2434	183.3	2397	2580	0.622	8.186
0.010	45.81	1.010	14670	191.8	2437	191.8	2392	2584	0.649	8.149
0.011	47.68	1.011	13412	199.6	2440	199.7	2388	2587	0.674	8.115
0.012	49.42	1.012	12358	206.9	2442	206.9	2383	2590	0.696	8.085
0.013	51.03	1.013	11462	213.7	2444	213.7	2379	2593	0.717	8.057
0.014	52.55	1.013	10691	220.0	2446	220.0	2376	2596	0.737	8.031
0.015	53.97	1.014	10020	225.9	2448	225.9	2372	2598	0.755	8.007
0.016	55.31	1.015	9431	231.5	2450	231.6	2369	2601	0.772	7.985
0.018	57.80	1.016	8443	241.9	2453	242.0	2363	2605	0.804	7.944
0.020	60.06	1.017	7648	251.4	2456	251.4	2358	2609	0.832	7.907
0.022	62.13	1.018	6994	260.1	2459	260.1	2352	2613	0.858	7.874
0.024	64.05	1.019	6445	268.1	2461	268.2	2348	2616	0.882	7.844
0.025	64.96	1.020	6203	271.9	2462	272.0	2345	2617	0.893	7.830
0.030	69.10	1.022	5228	289.2	2468	289.3	2335	2625	0.944	7.767
0.035	72.68	1.024	4525	304.3	2472	304.3	2326	2631	0.988	7.715
0.040	75.86	1.026	3993	317.6	2476	317.6	2318	2636	1.026	7.669
0.045	78.71	1.028	3576	329.6	2480	329.6	2311	2641	1.060	7.629
0.050	81.32	1.030	3240	340.5	2483	340.5	2305	2645	1.091	7.593
0.055	83.71	1.032	2963	350.5	2486	350.6	2299	2649	1.119	7.561
0.060	85.93	1.033	2732	359.8	2489	359.9	2293	2653	1.145	7.531
0.065	87.99	1.035	2535	368.5	2492	368.6	2288	2656	1.170	7.504
0.070	89.93	1.036	2365	376.7	2494	376.8	2283	2659	1.192	7.479
0.075	91.76	1.037	2217	384.4	2496	384.4	2278	2662	1.213	7.456
0.080	93.49	1.039	2087	391.6	2498	391.7	2273	2665	1.233	7.434
0.085	95.13	1.040	1972	398.5	2500	398.6	2269	2668	1.252	7.414
0.090	96.69	1.041	1869	405.1	2502	405.2	2265	2670	1.270	7.394
0.095	98.18	1.042	1777	411.4	2504	411.5	2261	2673	1.287	7.376
0.100	99.61	1.043	1694	417.4	2506	417.5	2257	2675	1.303	7.359
0.120	104.8	1.047	1428	439.2	2512	439.4	2244	2683	1.361	7.298
0.140	109.3	1.051	1237	458.3	2517	458.4	2232	2690	1.411	7.246
0.160	113.3	1.054	1091	475.2	2521	475.4	2221	2696	1.455	7.201
0.180	116.9	1.058	977.5	490.5	2525	490.7	2211	2701	1.494	7.162
0.200	120.2	1.061	885.7	504.5	2529	504.7	2202	2706	1.530	7.127
0.220	123.2	1.063	810.1	517.4	2532	517.6	2193	2711	1.563	7.095
0.240	126.1	1.066	746.7	529.4	2535	529.6	2185	2715	1.593	7.066
0.260	128.7	1.068	692.7	540.6	2538	540.9	2177	2718	1.621	7.039
0.280	131.2	1.071	646.2	551.1	2541	551.4	2170	2722	1.647	7.015
0.300	133.5	1.073	605.8	561.1	2543	561.4	2163	2725	1.672	6.992
0.320	135.7	1.075	570.2	570.6	2545	570.9	2157	2728	1.695	6.970
0.340	137.8	1.078	538.6	579.5	2547	579.9	2151	2731	1.717	6.950
0.360	139.8	1.080	510.5	588.1	2549	588.5	2145	2733	1.738	6.931
0.380	141.8	1.082	485.2	596.3	2551	596.8	2139	2736	1.758	6.913
0.400	143.6	1.084	462.4	604.2	2553	604.7	2133	2738	1.776	6.895
0.420	145.4	1.085	441.7	611.8	2555	612.3	2128	2740	1.795	6.879
0.440	147.1	1.087	422.7	619.1	2556	619.6	2123	2742	1.812	6.864
0.460	148.7	1.089	405.4	626.1	2558	626.6	2118	2744	1.829	6.849
0.480	150.3	1.091	389.5	632.9	2559	633.5	2113	2746	1.845	6.834
0.500	151.8	1.093	374.8	639.5	2561	640.1	2108	2748	1.860	6.821

P MPa	θ_{sat} °C	v_l	v_v	u_l	u_v	h_l	$\Delta(h_{vap})$	h_v	s_l	s_v
		m ³ /Mg		kJ/kg		kJ/kg		kJ/kg		kJ/(kgK)
0.600	158.8	1.101	315.6	669.7	2567	670.4	2086	2756	1.931	6.759
0.700	164.9	1.108	272.8	696.2	2572	697.0	2066	2763	1.992	6.707
0.800	170.4	1.115	240.3	720.0	2576	720.9	2047	2768	2.046	6.662
0.900	175.4	1.121	214.9	741.6	2580	742.6	2030	2773	2.094	6.621
1.000	179.9	1.127	194.4	761.4	2583	762.5	2015	2777	2.138	6.585
1.200	188.0	1.139	163.3	797.0	2588	798.3	1985	2784	2.216	6.522
1.400	195.0	1.149	140.8	828.4	2592	830.0	1959	2789	2.284	6.467
1.600	201.4	1.159	123.7	856.6	2595	858.5	1934	2793	2.343	6.420
1.800	207.1	1.168	110.4	882.4	2597	884.5	1911	2796	2.397	6.377
2.000	212.4	1.177	99.59	906.1	2599	908.5	1890	2798	2.447	6.339
2.200	217.2	1.185	90.70	928.3	2601	930.9	1869	2800	2.492	6.304
2.400	221.8	1.193	83.24	949.0	2602	951.9	1850	2801	2.534	6.271
2.600	226.0	1.201	76.90	968.5	2602	971.7	1831	2802	2.574	6.241
2.800	230.1	1.209	71.43	987.1	2603	990.5	1812	2803	2.611	6.212
3.000	233.9	1.217	66.66	1005	2603	1008	1795	2803	2.646	6.186
3.200	237.5	1.224	62.47	1022	2603	1025	1778	2803	2.679	6.160
3.400	240.9	1.231	58.76	1038	2603	1042	1761	2803	2.710	6.136
3.600	244.2	1.239	55.45	1053	2603	1058	1745	2802	2.740	6.113
3.800	247.3	1.246	52.47	1068	2602	1073	1729	2802	2.769	6.091
4.000	250.4	1.253	49.78	1082	2602	1087	1713	2801	2.797	6.070
4.200	253.3	1.259	47.33	1096	2601	1102	1698	2800	2.823	6.049
4.400	256.1	1.266	45.10	1110	2600	1116	1683	2799	2.849	6.029
4.600	258.8	1.273	43.06	1123	2599	1129	1668	2797	2.874	6.010
4.800	261.4	1.280	41.18	1136	2598	1142	1654	2796	2.898	5.992
5.000	263.9	1.286	39.45	1148	2597	1155	1640	2794	2.921	5.974
5.500	270.0	1.303	35.64	1178	2594	1185	1605	2790	2.976	5.931
6.000	275.6	1.319	32.45	1206	2590	1214	1571	2785	3.028	5.890
6.500	280.9	1.336	29.73	1233	2586	1241	1537	2779	3.076	5.852
7.000	285.8	1.352	27.38	1258	2581	1268	1505	2773	3.122	5.815
7.500	290.5	1.368	25.33	1283	2576	1293	1473	2766	3.166	5.779
8.000	295.0	1.385	23.53	1306	2570	1317	1441	2759	3.208	5.745
8.500	299.3	1.401	21.92	1329	2565	1341	1410	2751	3.248	5.712
9.000	303.3	1.418	20.49	1351	2559	1364	1379	2743	3.287	5.679
9.500	307.2	1.435	19.20	1373	2552	1386	1348	2734	3.324	5.647
10.00	311.0	1.453	18.03	1394	2545	1408	1317	2725	3.361	5.616
10.50	314.6	1.470	16.96	1414	2538	1429	1287	2716	3.396	5.585
11.00	318.1	1.489	15.99	1434	2530	1450	1256	2706	3.430	5.554
11.50	321.4	1.507	15.09	1454	2523	1471	1225	2696	3.464	5.524
12.00	324.7	1.526	14.26	1473	2514	1491	1194	2685	3.497	5.494
12.50	327.8	1.546	13.50	1492	2506	1512	1163	2674	3.529	5.464
13.00	330.9	1.566	12.78	1511	2497	1532	1131	2663	3.561	5.434
13.50	333.8	1.588	12.11	1530	2487	1551	1099	2651	3.592	5.403
14.00	336.7	1.610	11.49	1548	2477	1571	1067	2638	3.623	5.373
14.50	339.4	1.633	10.90	1567	2467	1591	1034	2625	3.654	5.342
15.00	342.2	1.657	10.34	1585	2456	1610	1000	2611	3.685	5.311
15.50	344.8	1.682	9.811	1604	2444	1630	966.2	2596	3.715	5.279
16.00	347.4	1.709	9.309	1622	2432	1650	931.1	2581	3.746	5.246
16.50	349.9	1.738	8.830	1641	2419	1670	894.9	2565	3.777	5.213
17.00	352.3	1.769	8.371	1660	2405	1690	857.5	2547	3.808	5.179
17.50	354.7	1.803	7.929	1679	2391	1711	818.5	2529	3.839	5.143
18.00	357.0	1.840	7.502	1699	2375	1732	777.7	2510	3.872	5.106
18.50	359.3	1.881	7.086	1719	2358	1754	734.7	2489	3.905	5.067
19.00	361.5	1.927	6.677	1741	2339	1777	688.9	2466	3.940	5.026
19.50	363.6	1.979	6.273	1763	2318	1801	639.4	2441	3.977	4.981
20.00	365.7	2.040	5.865	1786	2295	1827	585.1	2412	4.016	4.931
20.50	367.8	2.113	5.446	1812	2268	1855	523.9	2379	4.058	4.875
21.00	369.8	2.206	4.996	1841	2234	1888	451.0	2339	4.106	4.808
21.50	371.8	2.347	4.473	1879	2187	1930	353.6	2283	4.170	4.718
22.00	373.7	2.704	3.647	1952	2093	2011	161.7	2173	4.295	4.545
22.06	373.9	3.016	3.203	2002	2030	2069	32.31	2101	4.383	4.433

4 Subcooled and Superheated Data

θ_{sat}	P	0.015°C				50°C				100°C			
		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)
°C	MPa												
6.970	0.0010	1.000	0.021	0.022	0.00008	149093	2445	2594	9.243	172190	2516	2689	9.514
17.49	0.0020	1.000	0.021	0.023	0.00008	74524	2445	2594	8.922	86083	2516	2688	9.194
28.96	0.0040	1.000	0.021	0.025	0.00008	37238	2445	2594	8.601	43029	2516	2688	8.873
36.16	0.0060	1.000	0.021	0.027	0.00008	24810	2444	2593	8.413	28677	2516	2688	8.686
41.51	0.0080	1.000	0.021	0.029	0.00008	18596	2444	2593	8.279	21502	2516	2688	8.552
45.81	0.010	1.000	0.021	0.031	0.00008	14867	2443	2592	8.174	17196	2515	2687	8.449
60.06	0.020	1.000	0.021	0.041	0.00008	1.012	209.3	209.3	0.704	8585	2515	2686	8.126
75.86	0.040	1.000	0.022	0.062	0.00008	1.012	209.3	209.4	0.704	4280	2513	2684	7.801
85.93	0.060	1.000	0.022	0.082	0.00008	1.012	209.3	209.4	0.704	2844	2510	2681	7.608
93.49	0.080	1.000	0.023	0.103	0.00008	1.012	209.3	209.4	0.704	2127	2508	2678	7.470
99.61	0.100	1.000	0.023	0.123	0.00008	1.012	209.3	209.4	0.704	1696	2506	2676	7.361
111.3	0.150	1.000	0.024	0.174	0.00009	1.012	209.3	209.5	0.704	1.043	419.0	419.2	1.307
120.2	0.200	1.000	0.025	0.225	0.00009	1.012	209.3	209.5	0.704	1.043	419.0	419.2	1.307
127.4	0.250	1.000	0.026	0.276	0.00009	1.012	209.3	209.5	0.704	1.043	419.0	419.3	1.307
133.5	0.300	1.000	0.027	0.327	0.00010	1.012	209.3	209.6	0.704	1.043	419.0	419.3	1.307
138.9	0.350	1.000	0.028	0.378	0.00010	1.012	209.3	209.6	0.704	1.043	419.0	419.4	1.307
143.6	0.400	1.000	0.028	0.428	0.00010	1.012	209.3	209.7	0.704	1.043	419.0	419.4	1.307
147.9	0.450	1.000	0.029	0.479	0.00011	1.012	209.3	209.7	0.704	1.043	419.0	419.4	1.307
151.8	0.500	1.000	0.030	0.530	0.00011	1.012	209.3	209.8	0.704	1.043	418.9	419.5	1.307
158.8	0.600	1.000	0.032	0.632	0.00012	1.012	209.2	209.8	0.704	1.043	418.9	419.5	1.307
164.9	0.700	1.000	0.034	0.734	0.00012	1.012	209.2	209.9	0.703	1.043	418.9	419.6	1.307
170.4	0.800	1.000	0.036	0.836	0.00013	1.012	209.2	210.0	0.703	1.043	418.9	419.7	1.307
175.4	0.900	1.000	0.038	0.937	0.00014	1.012	209.2	210.1	0.703	1.043	418.8	419.8	1.307
179.9	1.000	1.000	0.039	1.039	0.00014	1.012	209.2	210.2	0.703	1.043	418.8	419.8	1.307
198.3	1.500	0.999	0.048	1.547	0.00017	1.011	209.1	210.6	0.703	1.043	418.7	420.2	1.306
212.4	2.000	0.999	0.057	2.055	0.00021	1.011	209.0	211.1	0.703	1.042	418.5	420.6	1.306
233.9	3.000	0.999	0.074	3.070	0.00026	1.011	208.9	211.9	0.702	1.042	418.2	421.3	1.305
250.4	4.000	0.998	0.091	4.084	0.00032	1.010	208.7	212.8	0.702	1.041	417.9	422.1	1.304
263.9	5.000	0.998	0.107	5.095	0.00037	1.010	208.6	213.6	0.702	1.041	417.6	422.8	1.303
275.6	6.000	0.997	0.123	6.106	0.00042	1.009	208.4	214.5	0.701	1.040	417.4	423.6	1.303
285.8	7.000	0.997	0.138	7.114	0.00046	1.009	208.3	215.4	0.701	1.040	417.1	424.4	1.302
295.0	8.000	0.996	0.152	8.122	0.00050	1.009	208.2	216.2	0.700	1.039	416.8	425.1	1.301
303.3	9.000	0.996	0.166	9.127	0.00053	1.008	208.0	217.1	0.700	1.039	416.5	425.9	1.300
311.0	10.00	0.995	0.180	10.13	0.00057	1.008	207.9	217.9	0.699	1.038	416.2	426.6	1.300
318.1	11.00	0.995	0.193	11.13	0.00060	1.007	207.7	218.8	0.699	1.038	416.0	427.4	1.299
324.7	12.00	0.994	0.205	12.14	0.00062	1.007	207.6	219.7	0.698	1.038	415.7	428.1	1.298
330.9	13.00	0.994	0.217	13.14	0.00064	1.006	207.4	220.5	0.698	1.037	415.4	428.9	1.297
336.7	14.00	0.993	0.229	14.13	0.00066	1.006	207.3	221.4	0.697	1.037	415.1	429.6	1.297
342.2	15.00	0.993	0.240	15.13	0.00067	1.006	207.1	222.2	0.697	1.036	414.8	430.4	1.296
347.4	16.00	0.992	0.250	16.13	0.00069	1.005	207.0	223.1	0.696	1.036	414.6	431.1	1.295
352.3	17.00	0.992	0.260	17.12	0.00069	1.005	206.9	223.9	0.696	1.035	414.3	431.9	1.294
357.0	18.00	0.991	0.270	18.11	0.00070	1.004	206.7	224.8	0.696	1.035	414.0	432.7	1.294
361.5	19.00	0.991	0.279	19.10	0.00070	1.004	206.6	225.7	0.695	1.034	413.8	433.4	1.293
365.7	20.00	0.990	0.288	20.09	0.00070	1.003	206.4	226.5	0.695	1.034	413.5	434.2	1.292
	25.00	0.988	0.324	25.02	0.00063	1.001	205.8	230.8	0.692	1.031	412.2	438.0	1.288
30.00	0.986	0.349	29.92	0.00049	0.999	205.1	235.1	0.690	1.029	410.9	441.7	1.285	
35.00	0.983	0.364	34.78	0.00028	0.997	204.4	239.3	0.688	1.027	409.6	445.5	1.281	
40.00	0.981	0.369	39.61	-0.00002	0.995	203.7	243.6	0.686	1.024	408.4	449.3	1.278	
45.00	0.979	0.364	44.41	-0.00038	0.993	203.1	247.8	0.683	1.022	407.1	453.1	1.274	
50.00	0.977	0.350	49.19	-0.00081	0.991	202.5	252.0	0.681	1.020	405.9	456.9	1.271	
55.00	0.975	0.327	53.93	-0.0013	0.989	201.8	256.3	0.679	1.018	404.8	460.7	1.267	
60.00	0.972	0.296	58.64	-0.0019	0.988	201.2	260.5	0.676	1.016	403.6	464.6	1.264	
65.00	0.970	0.257	63.33	-0.0025	0.986	200.6	264.7	0.674	1.014	402.5	468.4	1.260	
70.00	0.968	0.210	67.99	-0.0032	0.984	200.0	268.9	0.672	1.012	401.4	472.2	1.257	
75.00	0.966	0.156	72.63	-0.0039	0.982	199.4	273.1	0.670	1.010	400.3	476.0	1.254	
80.00	0.964	0.096	77.24	-0.0047	0.980	198.8	277.3	0.668	1.008	399.2	479.8	1.250	
85.00	0.962	0.029	81.83	-0.0055	0.978	198.3	281.4	0.665	1.006	398.1	483.6	1.247	
90.00	0.960	-0.043	86.40	-0.0064	0.977	197.7	285.6	0.663	1.004	397.1	487.5	1.244	
95.00	0.959	-0.122	90.94	-0.0073	0.975	197.1	289.8	0.661	1.002	396.1	491.3	1.241	
100.0	0.957	-0.205	95.46	-0.0083	0.973	196.6	293.9	0.659	1.000	395.1	495.1	1.237	

θ_{sat}	P	125°C					150°C					175°C				
		v m ³ /Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)		v m ³ /Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)		v m ³ /Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	
6.970	0.0010	183734	2552	2736	9.637		195275	2588	2784	9.753		206816	2625	2832	9.863	
17.49	0.0020	91857	2552	2736	9.317		97630	2588	2784	9.433		103401	2625	2832	9.543	
28.96	0.0040	45919	2552	2736	8.997		48807	2588	2783	9.113		51694	2625	2832	9.223	
36.16	0.0060	30606	2552	2736	8.809		32533	2588	2783	8.925		34458	2625	2831	9.036	
41.51	0.0080	22949	2552	2735	8.676		24395	2588	2783	8.792		25840	2625	2831	8.903	
45.81	0.010	18356	2552	2735	8.573		19513	2588	2783	8.689		20670	2624	2831	8.800	
60.06	0.020	9168	2551	2734	8.251		9749	2587	2782	8.368		10328	2624	2831	8.479	
75.86	0.040	4574	2549	2732	7.927		4866	2586	2781	8.046		5157	2623	2829	8.157	
85.93	0.060	3043	2548	2731	7.737		3239	2585	2779	7.856		3434	2622	2828	7.968	
93.49	0.080	2277	2546	2729	7.600		2425	2584	2778	7.720		2572	2621	2827	7.833	
99.61	0.100	1817	2545	2727	7.493		1937	2583	2777	7.615		2055	2621	2826	7.728	
111.3	0.150	1204	2541	2722	7.296		1286	2580	2773	7.421		1365	2618	2823	7.536	
120.2	0.200	897.8	2537	2717	7.153		959.9	2577	2769	7.281		1021	2616	2820	7.398	
127.4	0.250	1.065	524.8	525.1	1.582		764.4	2574	2765	7.171		813.6	2614	2817	7.290	
133.5	0.300	1.065	524.8	525.1	1.581		634.0	2571	2761	7.079		675.7	2611	2814	7.201	
138.9	0.350	1.065	524.8	525.2	1.581		540.8	2568	2757	7.000		577.1	2609	2811	7.124	
143.6	0.400	1.065	524.8	525.2	1.581		470.9	2564	2753	6.931		503.1	2607	2808	7.057	
147.9	0.450	1.065	524.7	525.2	1.581		416.4	2561	2748	6.868		445.5	2604	2805	6.997	
151.8	0.500	1.065	524.7	525.3	1.581		1.090	631.6	632.2	1.842		399.5	2602	2801	6.943	
158.8	0.600	1.065	524.7	525.3	1.581		1.090	631.6	632.3	1.842		330.3	2596	2795	6.847	
164.9	0.700	1.065	524.7	525.4	1.581		1.090	631.6	632.3	1.842		280.8	2591	2787	6.763	
170.4	0.800	1.065	524.6	525.5	1.581		1.090	631.5	632.4	1.841		243.7	2585	2780	6.688	
175.4	0.900	1.065	524.6	525.5	1.581		1.090	631.5	632.4	1.841		1.121	740.0	741.0	2.091	
179.9	1.000	1.064	524.5	525.6	1.581		1.090	631.4	632.5	1.841		1.121	740.0	741.1	2.090	
198.3	1.500	1.064	524.4	525.9	1.580		1.090	631.2	632.8	1.841		1.120	739.7	741.3	2.090	
212.4	2.000	1.064	524.2	526.3	1.580		1.089	630.9	633.1	1.840		1.120	739.4	741.6	2.089	
233.9	3.000	1.063	523.8	527.0	1.579		1.089	630.5	633.7	1.839		1.119	738.8	742.1	2.088	
250.4	4.000	1.063	523.4	527.7	1.578		1.088	630.0	634.4	1.838		1.118	738.2	742.7	2.087	
263.9	5.000	1.062	523.1	528.4	1.577		1.087	629.5	635.0	1.837		1.117	737.6	743.2	2.085	
275.6	6.000	1.062	522.7	529.1	1.576		1.087	629.1	635.6	1.836		1.117	737.0	743.7	2.084	
285.8	7.000	1.061	522.3	529.8	1.575		1.086	628.6	636.2	1.835		1.116	736.5	744.3	2.083	
295.0	8.000	1.061	522.0	530.5	1.574		1.086	628.2	636.9	1.834		1.115	735.9	744.8	2.081	
303.3	9.000	1.060	521.6	531.1	1.573		1.085	627.7	637.5	1.832		1.114	735.3	745.3	2.080	
311.0	10.00	1.059	521.2	531.8	1.573		1.084	627.3	638.1	1.831		1.113	734.8	745.9	2.079	
318.1	11.00	1.059	520.9	532.5	1.572		1.084	626.8	638.7	1.830		1.113	734.2	746.4	2.078	
324.7	12.00	1.058	520.5	533.2	1.571		1.083	626.4	639.4	1.829		1.112	733.6	747.0	2.076	
330.9	13.00	1.058	520.2	533.9	1.570		1.082	625.9	640.0	1.828		1.111	733.1	747.5	2.075	
336.7	14.00	1.057	519.8	534.6	1.569		1.082	625.5	640.6	1.827		1.110	732.5	748.1	2.074	
342.2	15.00	1.057	519.5	535.3	1.568		1.081	625.1	641.3	1.826		1.110	732.0	748.6	2.073	
347.4	16.00	1.056	519.1	536.0	1.567		1.080	624.6	641.9	1.825		1.109	731.4	749.2	2.071	
352.3	17.00	1.056	518.8	536.7	1.566		1.080	624.2	642.5	1.824		1.108	730.9	749.7	2.070	
357.0	18.00	1.055	518.4	537.4	1.565		1.079	623.7	643.2	1.823		1.107	730.4	750.3	2.069	
361.5	19.00	1.055	518.1	538.1	1.564		1.079	623.3	643.8	1.822		1.107	729.8	750.9	2.068	
365.7	20.00	1.054	517.8	538.8	1.564		1.078	622.9	644.4	1.821		1.106	729.3	751.4	2.066	
	25.00	1.051	516.1	542.4	1.559		1.075	620.8	647.7	1.816		1.102	726.7	754.2	2.060	
30.00	1.049	514.4	545.9	1.555	1.072		618.7	650.9	1.811		1.099	724.1	757.1	2.054		
35.00	1.046	512.8	549.4	1.551	1.069		616.7	654.1	1.806		1.096	721.7	760.0	2.049		
40.00	1.044	511.2	553.0	1.546	1.066		614.8	657.4	1.801		1.092	719.3	763.0	2.043		
45.00	1.041	509.7	556.5	1.542	1.063		612.9	660.7	1.796		1.089	716.9	765.9	2.038		
50.00	1.039	508.2	560.1	1.538	1.061		611.0	664.0	1.791		1.086	714.6	768.9	2.032		
55.00	1.037	506.7	563.7	1.534	1.058		609.2	667.3	1.787		1.083	712.4	772.0	2.027		
60.00	1.034	505.2	567.3	1.530	1.056		607.4	670.7	1.782		1.080	710.2	775.0	2.021		
65.00	1.032	503.8	570.9	1.526	1.053		605.6	674.1	1.777		1.077	708.1	778.1	2.016		
70.00	1.030	502.4	574.5	1.522	1.050		603.9	677.4	1.773		1.074	706.0	781.2	2.011		
75.00	1.028	501.0	578.1	1.518	1.048		602.2	680.8	1.769		1.071	704.0	784.3	2.006		
80.00	1.025	499.7	581.7	1.515	1.046		600.6	684.2	1.764		1.069	702.0	787.5	2.001		
85.00	1.023	498.4	585.4	1.511	1.043		598.9	687.6	1.760		1.066	700.0	790.6	1.997		
90.00	1.021	497.1	589.0	1.507	1.041		597.4	691.1	1.756		1.063	698.1	793.8	1.992		
95.00	1.019	495.8	592.6	1.504	1.039		595.8	694.5	1.752		1.061	696.3	797.0	1.987		
100.0	1.017	494.6	596.3	1.500	1.036		594.3	697.9	1.748		1.058	694.4	800.2	1.982		

θ_{sat}	P	200°C				225°C				250°C			
		°C	MPa	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg
6.970	0.0010	218356	2662	2880	9.968	229896	2699	2929	10.07	241435	2736	2978	10.16
17.49	0.0020	109172	2662	2880	9.648	114943	2699	2929	9.749	120713	2736	2978	9.845
28.96	0.0040	54581	2662	2880	9.328	57467	2699	2929	9.429	60353	2736	2978	9.525
36.16	0.0060	36383	2661	2880	9.141	38308	2699	2929	9.241	40232	2736	2978	9.337
41.51	0.0080	27285	2661	2880	9.008	28729	2699	2928	9.108	30172	2736	2978	9.205
45.81	0.010	21826	2661	2880	8.905	22981	2699	2928	9.005	24136	2736	2977	9.101
60.06	0.020	10907	2661	2879	8.584	11486	2698	2928	8.685	12064	2736	2977	8.781
75.86	0.040	5448	2660	2878	8.263	5738	2698	2927	8.364	6028	2735	2976	8.460
85.93	0.060	3628	2660	2877	8.074	3822	2697	2926	8.175	4016	2735	2976	8.272
93.49	0.080	2718	2659	2876	7.940	2864	2697	2926	8.042	3010	2734	2975	8.138
99.61	0.100	2172	2658	2875	7.836	2289	2696	2925	7.937	2406	2734	2975	8.035
111.3	0.150	1444	2656	2873	7.645	1523	2694	2923	7.747	1601	2733	2973	7.845
120.2	0.200	1080	2655	2871	7.508	1140	2693	2921	7.612	1199	2731	2971	7.710
127.4	0.250	862.1	2653	2868	7.401	909.9	2692	2919	7.506	957.4	2730	2970	7.605
133.5	0.300	716.4	2651	2866	7.313	756.6	2690	2917	7.418	796.4	2729	2968	7.518
138.9	0.350	612.4	2649	2863	7.238	647.1	2688	2915	7.344	681.4	2728	2966	7.444
143.6	0.400	534.3	2647	2861	7.172	565.0	2687	2913	7.279	595.2	2726	2964	7.380
147.9	0.450	473.6	2645	2858	7.114	501.1	2685	2911	7.222	528.1	2725	2963	7.324
151.8	0.500	425.0	2643	2856	7.061	449.9	2684	2909	7.170	474.4	2724	2961	7.272
158.8	0.600	352.1	2639	2851	6.968	373.2	2681	2905	7.080	393.9	2721	2958	7.183
164.9	0.700	300.0	2635	2845	6.888	318.4	2677	2900	7.002	336.4	2719	2954	7.107
170.4	0.800	260.9	2631	2840	6.818	277.3	2674	2896	6.933	293.2	2716	2950	7.040
175.4	0.900	230.4	2627	2834	6.754	245.3	2671	2892	6.872	259.6	2713	2947	6.980
179.9	1.000	206.0	2622	2828	6.696	219.7	2667	2887	6.817	232.7	2710	2943	6.926
198.3	1.500	132.5	2597	2796	6.454	142.6	2649	2863	6.592	152.0	2696	2924	6.711
212.4	2.000	1.156	850.1	852.5	2.330	103.8	2629	2836	6.416	111.5	2680	2903	6.547
233.9	3.000	1.155	849.4	852.9	2.328	1.199	963.3	966.9	2.563	70.63	2645	2857	6.289
250.4	4.000	1.154	848.6	853.3	2.327	1.197	962.3	967.1	2.561	1.252	1081	1086	2.793
263.9	5.000	1.153	847.9	853.7	2.325	1.196	961.4	967.4	2.559	1.250	1079	1086	2.791
275.6	6.000	1.152	847.2	854.1	2.324	1.195	960.5	967.6	2.557	1.248	1078	1086	2.789
285.8	7.000	1.151	846.5	854.5	2.322	1.194	959.5	967.9	2.555	1.246	1077	1086	2.786
295.0	8.000	1.150	845.7	854.9	2.320	1.192	958.6	968.1	2.554	1.245	1076	1086	2.784
303.3	9.000	1.149	845.0	855.4	2.319	1.191	957.7	968.4	2.552	1.243	1075	1086	2.782
311.0	10.00	1.148	844.3	855.8	2.317	1.190	956.8	968.7	2.550	1.241	1073	1086	2.779
318.1	11.00	1.147	843.6	856.2	2.316	1.189	955.9	969.0	2.548	1.239	1072	1086	2.777
324.7	12.00	1.146	842.9	856.7	2.314	1.187	955.0	969.2	2.546	1.238	1071	1086	2.775
330.9	13.00	1.145	842.2	857.1	2.313	1.186	954.1	969.5	2.544	1.236	1070	1086	2.772
336.7	14.00	1.144	841.5	857.5	2.311	1.185	953.2	969.8	2.543	1.235	1069	1086	2.770
342.2	15.00	1.144	840.8	858.0	2.310	1.184	952.4	970.1	2.541	1.233	1068	1086	2.768
347.4	16.00	1.143	840.2	858.4	2.308	1.183	951.5	970.4	2.539	1.231	1067	1086	2.766
352.3	17.00	1.142	839.5	858.9	2.307	1.182	950.7	970.7	2.537	1.230	1065	1086	2.764
357.0	18.00	1.141	838.8	859.3	2.306	1.180	949.8	971.1	2.536	1.228	1064	1086	2.762
361.5	19.00	1.140	838.1	859.8	2.304	1.179	949.0	971.4	2.534	1.227	1063	1087	2.759
365.7	20.00	1.139	837.5	860.3	2.303	1.178	948.1	971.7	2.532	1.225	1062	1087	2.757
	25.00	1.135	834.2	862.6	2.296	1.173	944.1	973.4	2.524	1.218	1057	1087	2.747
30.00	1.130	831.1	865.0	2.289	1.167	940.2	975.2	2.516	1.211	1052	1088	2.737	
35.00	1.126	828.1	867.5	2.282	1.162	936.4	977.1	2.508	1.205	1047	1089	2.728	
40.00	1.122	825.1	870.0	2.275	1.157	932.7	979.0	2.500	1.199	1043	1091	2.719	
45.00	1.119	822.2	872.6	2.269	1.153	929.2	981.1	2.493	1.193	1038	1092	2.710	
50.00	1.115	819.4	875.2	2.263	1.148	925.8	983.2	2.485	1.187	1034	1094	2.701	
55.00	1.111	816.7	877.8	2.257	1.144	922.5	985.4	2.478	1.182	1030	1095	2.693	
60.00	1.108	814.1	880.6	2.251	1.140	919.3	987.7	2.471	1.176	1026	1097	2.685	
65.00	1.104	811.5	883.3	2.245	1.136	916.2	990.0	2.465	1.171	1022	1099	2.677	
70.00	1.101	809.0	886.1	2.239	1.132	913.2	992.4	2.458	1.167	1019	1100	2.670	
75.00	1.098	806.6	888.9	2.233	1.128	910.2	994.8	2.451	1.162	1015	1102	2.662	
80.00	1.095	804.2	891.7	2.228	1.124	907.4	997.3	2.445	1.157	1012	1104	2.655	
85.00	1.091	801.8	894.6	2.222	1.120	904.6	999.8	2.439	1.153	1009	1107	2.648	
90.00	1.088	799.6	897.5	2.217	1.117	901.9	1002	2.433	1.149	1005	1109	2.641	
95.00	1.085	797.3	900.4	2.212	1.113	899.2	1005	2.427	1.145	1002	1111	2.634	
100.0	1.083	795.1	903.4	2.206	1.110	896.6	1008	2.421	1.141	999.1	1113	2.628	

θ_{sat}	P	275°C					300°C					325°C				
		°C	MPa	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	
6.970	0.0010	252974	2774	3027	10.26	264513	2812	3077	10.35	276051	2851	3127	10.43			
17.49	0.0020	126483	2774	3027	9.937	132253	2812	3077	10.03	138023	2851	3127	10.11			
28.96	0.0040	63238	2774	3027	9.617	66123	2812	3077	9.706	69009	2851	3127	9.791			
36.16	0.0060	42156	2774	3027	9.430	44080	2812	3077	9.519	46004	2851	3127	9.604			
41.51	0.0080	31615	2774	3027	9.297	33059	2812	3077	9.386	34502	2851	3127	9.471			
45.81	0.010	25291	2774	3027	9.194	26446	2812	3077	9.283	27600	2851	3127	9.368			
60.06	0.020	12642	2774	3027	8.874	13220	2812	3076	8.962	13797	2851	3127	9.048			
75.86	0.040	6317	2773	3026	8.553	6607	2812	3076	8.642	6896	2850	3126	8.728			
85.93	0.060	4209	2773	3026	8.365	4402	2811	3076	8.454	4595	2850	3126	8.540			
93.49	0.080	3155	2773	3025	8.231	3300	2811	3075	8.321	3445	2850	3125	8.407			
99.61	0.100	2523	2772	3024	8.128	2639	2811	3075	8.217	2755	2850	3125	8.303			
111.3	0.150	1679	2771	3023	7.939	1757	2810	3073	8.028	1835	2849	3124	8.115			
120.2	0.200	1258	2770	3022	7.804	1316	2809	3072	7.894	1375	2848	3123	7.981			
127.4	0.250	1005	2769	3020	7.699	1052	2808	3071	7.789	1099	2847	3122	7.876			
133.5	0.300	836.0	2768	3019	7.613	875.3	2807	3070	7.704	914.5	2846	3121	7.791			
138.9	0.350	715.5	2767	3017	7.540	749.4	2806	3068	7.631	783.1	2845	3120	7.718			
143.6	0.400	625.1	2766	3016	7.476	654.9	2805	3067	7.568	684.5	2845	3118	7.655			
147.9	0.450	554.9	2765	3014	7.420	581.4	2804	3066	7.512	607.8	2844	3117	7.600			
151.8	0.500	498.6	2764	3013	7.369	522.6	2803	3065	7.461	546.4	2843	3116	7.550			
158.8	0.600	414.3	2761	3010	7.281	434.4	2801	3062	7.374	454.4	2841	3114	7.463			
164.9	0.700	354.0	2759	3007	7.206	371.4	2799	3059	7.299	388.7	2840	3112	7.389			
170.4	0.800	308.8	2757	3004	7.140	324.2	2798	3057	7.234	339.4	2838	3110	7.324			
175.4	0.900	273.6	2755	3001	7.081	287.4	2796	3054	7.177	301.0	2836	3107	7.267			
179.9	1.000	245.5	2752	2998	7.029	258.0	2794	3052	7.125	270.3	2835	3105	7.216			
198.3	1.500	161.0	2740	2982	6.819	169.7	2784	3038	6.920	178.2	2826	3093	7.014			
212.4	2.000	118.7	2728	2965	6.663	125.5	2773	3024	6.768	132.1	2817	3081	6.866			
233.9	3.000	76.12	2700	2929	6.424	81.18	2751	2994	6.541	85.96	2798	3056	6.647			
250.4	4.000	54.61	2669	2887	6.231	58.87	2726	2962	6.364	62.78	2778	3029	6.480			
263.9	5.000	41.44	2632	2839	6.057	45.35	2699	2926	6.211	48.79	2757	3001	6.339			
275.6	6.000	1.317	1203	1211	3.022	36.19	2668	2886	6.070	39.39	2733	2969	6.214			
285.8	7.000	1.315	1201	1210	3.019	29.49	2633	2840	5.934	32.59	2707	2936	6.097			
295.0	8.000	1.312	1200	1210	3.016	24.28	2592	2786	5.794	27.41	2679	2898	5.985			
303.3	9.000	1.309	1198	1210	3.013	1.402	1332	1345	3.253	23.28	2648	2857	5.874			
311.0	10.00	1.307	1196	1209	3.010	1.398	1329	1343	3.249	19.88	2612	2810	5.760			
318.1	11.00	1.304	1195	1209	3.007	1.394	1327	1342	3.244	16.95	2569	2756	5.638			
324.7	12.00	1.302	1193	1209	3.004	1.390	1324	1341	3.240	14.31	2517	2688	5.499			
330.9	13.00	1.300	1191	1208	3.001	1.386	1322	1340	3.236	1.520	1471	1491	3.493			
336.7	14.00	1.297	1190	1208	2.998	1.382	1320	1339	3.232	1.512	1467	1488	3.486			
342.2	15.00	1.295	1188	1208	2.995	1.378	1318	1338	3.228	1.504	1463	1486	3.479			
347.4	16.00	1.293	1187	1208	2.992	1.375	1315	1337	3.224	1.497	1459	1483	3.473			
352.3	17.00	1.291	1185	1207	2.990	1.371	1313	1337	3.220	1.490	1456	1481	3.467			
357.0	18.00	1.288	1184	1207	2.987	1.368	1311	1336	3.216	1.483	1452	1479	3.461			
361.5	19.00	1.286	1182	1207	2.984	1.364	1309	1335	3.213	1.477	1449	1477	3.455			
365.7	20.00	1.284	1181	1207	2.981	1.361	1307	1334	3.209	1.471	1446	1475	3.449			
	25.00	1.274	1174	1206	2.969	1.346	1298	1331	3.192	1.444	1431	1467	3.424			
30.00	1.265	1168	1206	2.956	1.332	1289	1329	3.176	1.422	1418	1461	3.402				
35.00	1.256	1162	1206	2.945	1.320	1281	1327	3.161	1.402	1407	1456	3.382				
40.00	1.248	1156	1206	2.934	1.308	1273	1326	3.147	1.385	1397	1452	3.363				
45.00	1.240	1150	1206	2.923	1.298	1266	1325	3.134	1.370	1387	1449	3.346				
50.00	1.233	1145	1207	2.913	1.288	1260	1324	3.122	1.356	1379	1446	3.331				
55.00	1.226	1140	1208	2.903	1.279	1253	1324	3.110	1.343	1370	1444	3.316				
60.00	1.219	1135	1209	2.894	1.270	1247	1323	3.099	1.331	1363	1443	3.302				
65.00	1.213	1131	1210	2.884	1.262	1242	1324	3.088	1.320	1356	1441	3.289				
70.00	1.207	1126	1211	2.876	1.254	1236	1324	3.077	1.310	1349	1441	3.276				
75.00	1.201	1122	1212	2.867	1.247	1231	1324	3.067	1.300	1342	1440	3.265				
80.00	1.196	1118	1214	2.859	1.240	1226	1325	3.058	1.291	1336	1440	3.253				
85.00	1.190	1114	1215	2.851	1.233	1221	1326	3.048	1.283	1330	1439	3.242				
90.00	1.185	1110	1217	2.843	1.227	1216	1327	3.039	1.275	1325	1440	3.232				
95.00	1.180	1106	1218	2.835	1.221	1212	1328	3.030	1.267	1319	1440	3.221				
100.0	1.175	1103	1220	2.828	1.215	1208	1329	3.022	1.260	1314	1440	3.212				

θ_{sat}	P	350°C				375°C				400°C			
		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)
°C	MPa												
6.970	0.0010	287590	2890	3178	10.51	299128	2930	3229	10.59	310667	2969	3280	10.67
17.49	0.0020	143792	2890	3178	10.19	149562	2930	3229	10.27	155331	2969	3280	10.35
28.96	0.0040	71894	2890	3178	9.874	74779	2930	3229	9.955	77664	2969	3280	10.03
36.16	0.0060	47928	2890	3178	9.687	49851	2930	3229	9.767	51774	2969	3280	9.845
41.51	0.0080	35944	2890	3178	9.554	37387	2929	3229	9.635	38830	2969	3280	9.712
45.81	0.010	28755	2890	3178	9.451	29909	2929	3229	9.532	31063	2969	3280	9.609
60.06	0.020	14375	2890	3177	9.131	14952	2929	3228	9.211	15530	2969	3280	9.289
75.86	0.040	7185	2890	3177	8.811	7474	2929	3228	8.891	7763	2969	3279	8.969
85.93	0.060	4788	2889	3177	8.623	4981	2929	3228	8.704	5174	2969	3279	8.782
93.49	0.080	3590	2889	3176	8.490	3735	2929	3227	8.570	3879	2969	3279	8.648
99.61	0.100	2871	2889	3176	8.387	2987	2928	3227	8.467	3103	2968	3279	8.545
111.3	0.150	1912	2888	3175	8.198	1990	2928	3226	8.279	2067	2968	3278	8.357
120.2	0.200	1433	2887	3174	8.064	1491	2927	3225	8.145	1549	2967	3277	8.224
127.4	0.250	1145	2887	3173	7.960	1192	2926	3224	8.041	1239	2967	3276	8.120
133.5	0.300	953.6	2886	3172	7.875	992.6	2926	3224	7.956	1032	2966	3275	8.035
138.9	0.350	816.7	2885	3171	7.803	850.2	2925	3223	7.884	883.6	2965	3275	7.963
143.6	0.400	714.0	2884	3170	7.740	743.3	2924	3222	7.821	772.6	2965	3274	7.900
147.9	0.450	634.1	2884	3169	7.684	660.2	2924	3221	7.766	686.3	2964	3273	7.845
151.8	0.500	570.2	2883	3168	7.635	593.8	2923	3220	7.716	617.3	2964	3272	7.796
158.8	0.600	474.3	2882	3166	7.548	494.0	2922	3218	7.630	513.7	2963	3271	7.710
164.9	0.700	405.8	2880	3164	7.475	422.8	2921	3217	7.557	439.8	2961	3269	7.637
170.4	0.800	354.4	2879	3162	7.411	369.4	2919	3215	7.493	384.3	2960	3268	7.573
175.4	0.900	314.5	2877	3160	7.354	327.8	2918	3213	7.437	341.1	2959	3266	7.517
179.9	1.000	282.5	2876	3158	7.303	294.6	2917	3211	7.386	306.6	2958	3264	7.467
198.3	1.500	186.6	2868	3148	7.104	194.8	2910	3202	7.189	203.0	2952	3256	7.271
212.4	2.000	138.6	2860	3138	6.958	145.0	2903	3193	7.046	151.2	2946	3248	7.129
233.9	3.000	90.56	2844	3116	6.745	95.02	2889	3174	6.837	99.38	2934	3232	6.923
250.4	4.000	66.47	2827	3093	6.584	70.01	2875	3155	6.681	73.43	2921	3214	6.771
263.9	5.000	51.97	2809	3069	6.452	54.97	2859	3134	6.554	57.84	2907	3197	6.648
275.6	6.000	42.25	2790	3044	6.336	44.91	2843	3113	6.444	47.42	2894	3178	6.543
285.8	7.000	35.26	2770	3017	6.230	37.69	2827	3090	6.346	39.96	2879	3159	6.450
295.0	8.000	29.97	2748	2988	6.132	32.25	2809	3067	6.256	34.34	2865	3139	6.366
303.3	9.000	25.82	2725	2957	6.038	27.99	2790	3042	6.172	29.96	2849	3119	6.288
311.0	10.00	22.44	2700	2924	5.946	24.56	2771	3016	6.091	26.44	2833	3097	6.214
318.1	11.00	19.63	2672	2888	5.854	21.72	2750	2989	6.013	23.54	2816	3075	6.144
324.7	12.00	17.22	2641	2848	5.761	19.33	2728	2960	5.936	21.11	2799	3052	6.076
330.9	13.00	15.12	2607	2804	5.664	17.28	2704	2928	5.860	19.03	2780	3028	6.011
336.7	14.00	13.23	2568	2753	5.560	15.49	2678	2895	5.783	17.24	2761	3002	5.946
342.2	15.00	11.48	2521	2693	5.444	13.90	2650	2859	5.705	15.67	2741	2976	5.882
347.4	16.00	9.766	2461	2617	5.304	12.48	2620	2820	5.624	14.28	2719	2948	5.818
352.3	17.00	1.727	1637	1667	3.770	11.18	2586	2776	5.539	13.04	2696	2918	5.754
357.0	18.00	1.703	1628	1659	3.755	9.964	2548	2727	5.447	11.92	2672	2886	5.688
361.5	19.00	1.683	1620	1652	3.741	8.812	2503	2671	5.345	10.89	2646	2853	5.621
365.7	20.00	1.665	1613	1646	3.729	7.676	2449	2603	5.227	9.950	2618	2817	5.553
	25.00	1.599	1584	1624	3.680	1.978	1800	1849	4.034	6.005	2429	2579	5.140
30.00	1.553	1562	1609	3.644	1.792	1738	1792	3.931	2.798	2069	2153	4.476	
35.00	1.517	1544	1598	3.613	1.701	1703	1762	3.872	2.105	1915	1989	4.214	
40.00	1.488	1529	1589	3.587	1.641	1677	1743	3.829	1.911	1855	1931	4.114	
45.00	1.464	1516	1582	3.564	1.596	1656	1728	3.794	1.803	1817	1898	4.051	
50.00	1.442	1504	1576	3.543	1.560	1639	1717	3.764	1.731	1788	1874	4.003	
55.00	1.424	1493	1571	3.524	1.529	1623	1707	3.738	1.676	1765	1857	3.964	
60.00	1.407	1483	1567	3.507	1.503	1610	1700	3.715	1.633	1745	1843	3.932	
65.00	1.391	1474	1564	3.490	1.481	1597	1694	3.694	1.597	1728	1832	3.903	
70.00	1.377	1465	1562	3.475	1.461	1586	1688	3.674	1.566	1713	1823	3.878	
75.00	1.364	1457	1559	3.460	1.442	1576	1684	3.656	1.540	1700	1815	3.855	
80.00	1.352	1450	1558	3.447	1.426	1566	1680	3.640	1.516	1687	1809	3.834	
85.00	1.341	1442	1556	3.434	1.411	1557	1677	3.624	1.495	1676	1803	3.815	
90.00	1.331	1435	1555	3.421	1.397	1549	1675	3.609	1.476	1666	1799	3.797	
95.00	1.321	1429	1555	3.409	1.384	1541	1673	3.595	1.459	1656	1795	3.780	
100.0	1.312	1423	1554	3.398	1.372	1534	1671	3.582	1.443	1647	1791	3.764	

θ_{sat}	P	425°C					450°C					500°C				
		°C	MPa	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	
6.970	0.0010	322205	3010	3332	10.75	333744	3050	3384	10.82	356820	3133	3490	10.96			
17.49	0.0020	161101	3010	3332	10.43	166870	3050	3384	10.50	178409	3133	3490	10.64			
28.96	0.0040	80549	3010	3332	10.11	83433	3050	3384	10.18	89203	3133	3490	10.32			
36.16	0.0060	53698	3010	3332	9.921	55621	3050	3384	9.994	59468	3133	3490	10.14			
41.51	0.0080	40272	3010	3332	9.788	41715	3050	3384	9.861	44600	3133	3490	10.00			
45.81	0.010	32217	3010	3332	9.685	33371	3050	3384	9.758	35680	3133	3490	9.900			
60.06	0.020	16107	3009	3332	9.365	16684	3050	3384	9.438	17838	3133	3490	9.580			
75.86	0.040	8052	3009	3331	9.045	8340	3050	3384	9.118	8918	3133	3489	9.260			
85.93	0.060	5367	3009	3331	8.857	5559	3050	3383	8.931	5944	3132	3489	9.072			
93.49	0.080	4024	3009	3331	8.724	4169	3050	3383	8.798	4458	3132	3489	8.939			
99.61	0.100	3218	3009	3331	8.621	3334	3049	3383	8.695	3566	3132	3489	8.836			
111.3	0.150	2144	3008	3330	8.433	2222	3049	3382	8.507	2376	3132	3488	8.649			
120.2	0.200	1607	3008	3329	8.300	1665	3048	3382	8.373	1781	3131	3488	8.515			
127.4	0.250	1285	3007	3328	8.196	1332	3048	3381	8.270	1425	3131	3487	8.412			
133.5	0.300	1070	3007	3328	8.111	1109	3048	3380	8.185	1187	3131	3487	8.327			
138.9	0.350	917.0	3006	3327	8.039	950.3	3047	3380	8.113	1017	3130	3486	8.255			
143.6	0.400	801.9	3006	3326	7.977	831.1	3047	3379	8.051	889.4	3130	3486	8.193			
147.9	0.450	712.4	3005	3326	7.922	738.4	3046	3378	7.996	790.2	3129	3485	8.138			
151.8	0.500	640.8	3004	3325	7.872	664.2	3046	3378	7.947	710.9	3129	3484	8.089			
158.8	0.600	533.4	3003	3323	7.787	553.0	3045	3376	7.861	592.0	3128	3483	8.004			
164.9	0.700	456.7	3002	3322	7.714	473.5	3044	3375	7.789	507.0	3127	3482	7.932			
170.4	0.800	399.1	3001	3321	7.651	413.9	3043	3374	7.726	443.3	3127	3481	7.869			
175.4	0.900	354.4	3000	3319	7.595	367.5	3042	3373	7.670	393.8	3126	3480	7.814			
179.9	1.000	318.6	2999	3318	7.545	330.4	3041	3371	7.620	354.1	3125	3479	7.764			
198.3	1.500	211.1	2994	3311	7.350	219.2	3036	3365	7.426	235.2	3121	3474	7.572			
212.4	2.000	157.4	2988	3303	7.209	163.5	3031	3358	7.287	175.7	3117	3468	7.434			
233.9	3.000	103.7	2977	3288	7.006	107.9	3021	3345	7.086	116.2	3109	3457	7.236			
250.4	4.000	76.77	2966	3273	6.857	80.04	3011	3331	6.939	86.44	3100	3446	7.092			
263.9	5.000	60.62	2954	3257	6.737	63.32	3001	3317	6.821	68.58	3092	3435	6.978			
275.6	6.000	49.83	2942	3241	6.635	52.17	2990	3303	6.722	56.67	3083	3423	6.883			
285.8	7.000	42.11	2930	3225	6.546	44.19	2979	3288	6.635	48.16	3074	3411	6.800			
295.0	8.000	36.31	2917	3208	6.465	38.19	2968	3273	6.558	41.77	3065	3399	6.727			
303.3	9.000	31.79	2904	3190	6.392	33.52	2956	3258	6.487	36.79	3056	3387	6.660			
311.0	10.00	28.16	2890	3172	6.323	29.78	2945	3242	6.422	32.81	3047	3375	6.599			
318.1	11.00	25.18	2876	3153	6.258	26.71	2932	3226	6.361	29.55	3038	3363	6.543			
324.7	12.00	22.69	2862	3134	6.196	24.15	2920	3210	6.303	26.83	3028	3350	6.490			
330.9	13.00	20.57	2847	3114	6.137	21.97	2907	3193	6.248	24.52	3018	3337	6.440			
336.7	14.00	18.75	2831	3094	6.079	20.10	2894	3176	6.195	22.54	3008	3324	6.393			
342.2	15.00	17.16	2815	3072	6.023	18.48	2881	3158	6.143	20.83	2998	3311	6.348			
347.4	16.00	15.76	2798	3050	5.968	17.05	2867	3140	6.094	19.32	2988	3297	6.305			
352.3	17.00	14.51	2781	3027	5.913	15.78	2853	3121	6.045	17.99	2978	3284	6.263			
357.0	18.00	13.40	2762	3004	5.859	14.65	2838	3102	5.998	16.81	2967	3270	6.222			
361.5	19.00	12.39	2743	2979	5.805	13.64	2823	3082	5.951	15.75	2956	3256	6.183			
365.7	20.00	11.48	2723	2953	5.751	12.72	2807	3062	5.904	14.79	2945	3241	6.145			
	25.00	7.886	2608	2805	5.471	9.176	2721	2951	5.676	11.14	2887	3166	5.964			
30.00	5.299	2453	2612	5.147	6.737	2619	2821	5.442	8.690	2824	3085	5.796				
35.00	3.434	2253	2373	4.775	4.957	2497	2671	5.195	6.932	2755	2998	5.633				
40.00	2.538	2098	2199	4.504	3.691	2364	2512	4.945	5.623	2682	2906	5.474				
45.00	2.187	2013	2111	4.362	2.915	2246	2378	4.737	4.633	2605	2813	5.321				
50.00	2.009	1960	2061	4.275	2.487	2160	2285	4.590	3.890	2528	2723	5.176				
55.00	1.896	1922	2027	4.212	2.242	2100	2223	4.488	3.345	2456	2640	5.047				
60.00	1.816	1893	2002	4.163	2.085	2055	2180	4.414	2.952	2393	2570	4.936				
65.00	1.754	1869	1983	4.123	1.975	2020	2148	4.356	2.670	2339	2513	4.843				
70.00	1.705	1848	1967	4.088	1.892	1991	2124	4.308	2.463	2294	2466	4.766				
75.00	1.664	1830	1955	4.058	1.827	1967	2104	4.268	2.308	2255	2428	4.702				
80.00	1.630	1814	1944	4.031	1.774	1946	2088	4.233	2.188	2222	2397	4.647				
85.00	1.599	1799	1935	4.007	1.729	1927	2074	4.203	2.092	2194	2372	4.600				
90.00	1.573	1786	1928	3.985	1.691	1911	2063	4.175	2.014	2169	2350	4.559				
95.00	1.549	1774	1921	3.964	1.658	1896	2053	4.150	1.949	2147	2332	4.523				
100.0	1.527	1763	1916	3.945	1.628	1882	2045	4.127	1.893	2127	2316	4.490				

θ_{sat}	P	550°C				600°C				650°C			
		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)
°C	MPa												
6.970	0.0010	379896	3217	3597	11.10	402973	3303	3706	11.23	426049	3391	3817	11.35
17.49	0.0020	189947	3217	3597	10.78	201485	3303	3706	10.91	213024	3391	3817	11.03
28.96	0.0040	94972	3217	3597	10.46	100742	3303	3706	10.59	106511	3391	3817	10.71
36.16	0.0060	63314	3217	3597	10.27	67161	3303	3706	10.40	71007	3391	3817	10.52
41.51	0.0080	47485	3217	3597	10.14	50370	3303	3706	10.27	53255	3391	3817	10.39
45.81	0.010	37988	3217	3597	10.03	40296	3303	3706	10.16	42603	3391	3817	10.29
60.06	0.020	18993	3217	3597	9.714	20147	3303	3706	9.843	21301	3391	3817	9.967
75.86	0.040	9495	3217	3597	9.394	10073	3303	3706	9.523	10650	3391	3817	9.647
85.93	0.060	6329	3217	3597	9.207	6714	3303	3706	9.336	7099	3391	3817	9.459
93.49	0.080	4746	3217	3596	9.074	5035	3303	3706	9.203	5324	3391	3817	9.327
99.61	0.100	3797	3217	3596	8.971	4028	3303	3706	9.100	4259	3391	3817	9.223
111.3	0.150	2530	3216	3596	8.783	2685	3302	3705	8.912	2839	3390	3816	9.036
120.2	0.200	1897	3216	3595	8.650	2013	3302	3705	8.779	2129	3390	3816	8.903
127.4	0.250	1517	3216	3595	8.547	1610	3302	3704	8.676	1703	3390	3816	8.800
133.5	0.300	1264	3215	3594	8.462	1341	3302	3704	8.591	1419	3390	3815	8.715
138.9	0.350	1083	3215	3594	8.391	1149	3301	3704	8.520	1216	3389	3815	8.644
143.6	0.400	947.5	3215	3594	8.329	1006	3301	3703	8.458	1064	3389	3815	8.582
147.9	0.450	842.0	3214	3593	8.274	893.6	3301	3703	8.403	945.2	3389	3814	8.527
151.8	0.500	757.6	3214	3593	8.225	804.1	3300	3702	8.354	850.5	3389	3814	8.478
158.8	0.600	630.9	3213	3592	8.140	669.8	3300	3702	8.270	708.5	3388	3813	8.394
164.9	0.700	540.5	3213	3591	8.068	573.8	3299	3701	8.198	607.1	3388	3813	8.322
170.4	0.800	472.6	3212	3590	8.005	501.9	3299	3700	8.135	531.0	3387	3812	8.260
175.4	0.900	419.9	3211	3589	7.950	445.9	3298	3699	8.080	471.8	3387	3811	8.205
179.9	1.000	377.7	3210	3588	7.901	401.1	3297	3699	8.031	424.5	3386	3811	8.156
198.3	1.500	251.0	3207	3584	7.709	266.8	3294	3695	7.840	282.5	3383	3807	7.966
212.4	2.000	187.7	3204	3579	7.572	199.6	3292	3691	7.704	211.5	3381	3804	7.830
233.9	3.000	124.4	3197	3570	7.377	132.4	3285	3683	7.510	140.5	3376	3797	7.637
250.4	4.000	92.70	3190	3560	7.235	98.86	3279	3675	7.371	104.9	3370	3790	7.499
263.9	5.000	73.69	3182	3551	7.124	78.70	3273	3667	7.261	83.64	3365	3783	7.390
275.6	6.000	61.02	3175	3541	7.031	65.27	3267	3659	7.169	69.43	3360	3776	7.300
285.8	7.000	51.97	3168	3532	6.951	55.66	3261	3651	7.091	59.29	3354	3769	7.223
295.0	8.000	45.17	3160	3522	6.880	48.46	3255	3642	7.022	51.68	3349	3762	7.156
303.3	9.000	39.89	3153	3512	6.816	42.86	3248	3634	6.960	45.75	3343	3755	7.095
311.0	10.00	35.65	3145	3502	6.758	38.38	3242	3626	6.904	41.02	3338	3748	7.041
318.1	11.00	32.19	3138	3492	6.705	34.71	3236	3617	6.853	37.14	3332	3741	6.991
324.7	12.00	29.30	3130	3482	6.655	31.65	3229	3609	6.805	33.91	3327	3734	6.945
330.9	13.00	26.86	3122	3471	6.609	29.06	3223	3600	6.761	31.18	3321	3727	6.902
336.7	14.00	24.76	3114	3461	6.565	26.84	3216	3592	6.719	28.84	3316	3719	6.861
342.2	15.00	22.94	3106	3450	6.523	24.92	3209	3583	6.680	26.80	3310	3712	6.823
347.4	16.00	21.35	3098	3440	6.483	23.24	3203	3574	6.642	25.03	3304	3705	6.787
352.3	17.00	19.95	3090	3429	6.445	21.75	3196	3566	6.606	23.46	3299	3697	6.753
357.0	18.00	18.70	3082	3418	6.408	20.43	3189	3557	6.572	22.06	3293	3690	6.720
361.5	19.00	17.58	3073	3407	6.373	19.25	3182	3548	6.539	20.82	3287	3683	6.689
365.7	20.00	16.57	3065	3396	6.339	18.18	3175	3539	6.507	19.69	3281	3675	6.659
	25.00	12.74	3021	3339	6.182	14.14	3140	3494	6.364	15.43	3252	3638	6.524
30.00	10.18	2974	3280	6.040	11.44	3103	3447	6.237	12.59	3222	3599	6.407	
35.00	8.348	2926	3218	5.909	9.523	3066	3399	6.123	10.57	3191	3561	6.303	
40.00	6.985	2875	3154	5.786	8.089	3027	3350	6.017	9.053	3159	3522	6.208	
45.00	5.937	2823	3090	5.668	6.982	2987	3301	5.918	7.884	3128	3482	6.120	
50.00	5.117	2769	3025	5.556	6.108	2947	3253	5.825	6.957	3096	3443	6.037	
55.00	4.469	2716	2962	5.450	5.405	2907	3204	5.736	6.207	3063	3405	5.960	
60.00	3.955	2665	2902	5.352	4.833	2867	3157	5.653	5.591	3031	3367	5.887	
65.00	3.547	2615	2846	5.261	4.363	2827	3111	5.574	5.078	2999	3330	5.818	
70.00	3.224	2569	2795	5.178	3.975	2789	3067	5.500	4.648	2968	3293	5.752	
75.00	2.966	2527	2750	5.105	3.653	2752	3026	5.431	4.285	2937	3259	5.690	
80.00	2.760	2489	2710	5.039	3.384	2717	2988	5.367	3.975	2908	3226	5.632	
85.00	2.594	2455	2675	4.981	3.159	2684	2953	5.308	3.710	2879	3194	5.577	
90.00	2.457	2424	2645	4.929	2.969	2653	2921	5.254	3.483	2851	3164	5.525	
95.00	2.344	2396	2619	4.882	2.809	2625	2891	5.204	3.286	2824	3136	5.477	
100.0	2.249	2371	2596	4.841	2.672	2598	2865	5.158	3.115	2799	3110	5.431	

θ_{sat}	P	700°C					750°C					800°C				
		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)		v m³/Mg	u kJ/kg	h kJ/kg	s kJ/(kgK)	
°C	MPa															
6.970	0.0010	449125	3481	3930	11.47		472201	3572	4044	11.58		495277	3665	4161	11.69	
17.49	0.0020	224562	3481	3930	11.15		236100	3572	4044	11.26		247638	3665	4161	11.37	
28.96	0.0040	112280	3481	3930	10.83		118049	3572	4044	10.94		123819	3665	4161	11.05	
36.16	0.0060	74853	3481	3930	10.64		78699	3572	4044	10.76		82545	3665	4161	10.87	
41.51	0.0080	56139	3481	3930	10.51		59024	3572	4044	10.62		61909	3665	4161	10.73	
45.81	0.010	44911	3481	3930	10.41		47219	3572	4044	10.52		49527	3665	4161	10.63	
60.06	0.020	22455	3481	3930	10.09		23609	3572	4044	10.20		24763	3665	4161	10.31	
75.86	0.040	11227	3481	3930	9.766		11804	3572	4044	9.880		12381	3665	4160	9.991	
85.93	0.060	7484	3481	3930	9.578		7869	3572	4044	9.693		8254	3665	4160	9.804	
93.49	0.080	5613	3480	3929	9.445		5901	3572	4044	9.560		6190	3665	4160	9.671	
99.61	0.100	4490	3480	3929	9.342		4721	3572	4044	9.457		4952	3665	4160	9.568	
111.3	0.150	2993	3480	3929	9.155		3147	3572	4044	9.270		3301	3665	4160	9.381	
120.2	0.200	2244	3480	3929	9.022		2360	3571	4043	9.137		2475	3665	4160	9.248	
127.4	0.250	1795	3480	3928	8.919		1888	3571	4043	9.034		1980	3664	4160	9.145	
133.5	0.300	1496	3479	3928	8.834		1573	3571	4043	8.949		1650	3664	4159	9.060	
138.9	0.350	1282	3479	3928	8.763		1348	3571	4043	8.878		1414	3664	4159	8.989	
143.6	0.400	1122	3479	3928	8.701		1179	3571	4042	8.816		1237	3664	4159	8.927	
147.9	0.450	996.8	3479	3927	8.647		1048	3570	4042	8.762		1100	3664	4159	8.873	
151.8	0.500	897.0	3479	3927	8.598		943.3	3570	4042	8.713		989.7	3664	4158	8.824	
158.8	0.600	747.2	3478	3926	8.513		785.9	3570	4041	8.628		824.6	3663	4158	8.740	
164.9	0.700	640.3	3478	3926	8.442		673.5	3569	4041	8.557		706.6	3663	4157	8.668	
170.4	0.800	560.1	3477	3925	8.379		589.2	3569	4040	8.495		618.2	3662	4157	8.606	
175.4	0.900	497.7	3477	3925	8.325		523.6	3569	4040	8.440		549.4	3662	4157	8.551	
179.9	1.000	447.8	3476	3924	8.275		471.1	3568	4039	8.391		494.4	3662	4156	8.502	
198.3	1.500	298.1	3474	3921	8.086		313.7	3566	4037	8.202		329.3	3660	4154	8.314	
212.4	2.000	223.3	3472	3918	7.951		235.0	3564	4034	8.067		246.7	3658	4152	8.179	
233.9	3.000	148.4	3467	3912	7.759		156.3	3560	4029	7.876		164.2	3654	4147	7.988	
250.4	4.000	111.0	3462	3906	7.621		117.0	3556	4024	7.739		122.9	3651	4142	7.852	
263.9	5.000	88.52	3458	3900	7.514		93.35	3552	4018	7.632		98.16	3647	4138	7.746	
275.6	6.000	73.55	3453	3894	7.425		77.61	3547	4013	7.544		81.65	3643	4133	7.658	
285.8	7.000	62.85	3448	3888	7.349		66.37	3543	4008	7.469		69.86	3639	4128	7.584	
295.0	8.000	54.83	3444	3882	7.282		57.94	3539	4003	7.403		61.01	3636	4124	7.518	
303.3	9.000	48.59	3439	3876	7.223		51.38	3535	3997	7.344		54.13	3632	4119	7.461	
311.0	10.00	43.60	3434	3870	7.169		46.13	3531	3992	7.292		48.63	3628	4114	7.408	
318.1	11.00	39.51	3429	3864	7.120		41.84	3526	3987	7.243		44.13	3624	4110	7.361	
324.7	12.00	36.11	3424	3858	7.075		38.26	3522	3981	7.199		40.37	3621	4105	7.317	
330.9	13.00	33.23	3420	3852	7.033		35.23	3518	3976	7.158		37.20	3617	4100	7.277	
336.7	14.00	30.76	3415	3845	6.994		32.64	3514	3971	7.120		34.48	3613	4096	7.239	
342.2	15.00	28.62	3410	3839	6.957		30.39	3509	3965	7.084		32.12	3609	4091	7.204	
347.4	16.00	26.75	3405	3833	6.922		28.42	3505	3960	7.050		30.06	3605	4086	7.170	
352.3	17.00	25.10	3400	3827	6.889		26.69	3501	3954	7.017		28.24	3602	4082	7.139	
357.0	18.00	23.63	3395	3820	6.858		25.14	3496	3949	6.987		26.62	3598	4077	7.109	
361.5	19.00	22.32	3390	3814	6.828		23.76	3492	3944	6.958		25.17	3594	4072	7.080	
365.7	20.00	21.13	3385	3808	6.799		22.52	3488	3938	6.930		23.87	3590	4067	7.053	
	25.00	16.64	3360	3776	6.670		17.80	3466	3911	6.805		18.92	3571	4044	6.932	
30.00	13.65	3334	3744	6.560	14.66	3444	3883	6.700	15.63	3551	4020	6.830				
35.00	11.52	3308	3712	6.462	12.42	3421	3856	6.607	13.28	3532	3996	6.741				
40.00	9.930	3282	3679	6.374	10.75	3399	3828	6.524	11.52	3512	3973	6.661				
45.00	8.697	3255	3647	6.293	9.449	3376	3801	6.448	10.16	3492	3949	6.589				
50.00	7.717	3229	3615	6.218	8.416	3353	3774	6.378	9.072	3472	3926	6.523				
55.00	6.921	3202	3583	6.148	7.576	3330	3747	6.312	8.188	3452	3903	6.461				
60.00	6.265	3175	3551	6.081	6.881	3308	3720	6.251	7.456	3433	3880	6.403				
65.00	5.716	3149	3520	6.019	6.299	3285	3694	6.193	6.840	3413	3858	6.349				
70.00	5.252	3123	3490	5.960	5.804	3263	3669	6.139	6.317	3394	3836	6.298				
75.00	4.857	3097	3461	5.904	5.380	3240	3644	6.087	5.867	3374	3814	6.250				
80.00	4.517	3071	3433	5.851	5.014	3219	3620	6.038	5.477	3355	3793	6.204				
85.00	4.222	3047	3405	5.800	4.695	3197	3596	5.991	5.136	3336	3773	6.160				
90.00	3.966	3022	3379	5.752	4.416	3176	3573	5.947	4.836	3318	3753	6.118				
95.00	3.742	2999	3354	5.707	4.170	3155	3552	5.905	4.571	3300	3734	6.079				
100.0	3.546	2976	3331	5.664	3.953	3135	3530	5.864	4.336	3282	3715	6.041				