

TABLES OF PROPERTY VALUES FOR MOIST AIR

(in addition to: Herrmann, S., H.-J. Kretzschmar, V. C. Aute, D. P. Gatley, and E. Vogel. 2020. Transport Properties of Real Moist Air, Dry Air, Steam, and Water, submitted to *Sci. Tech. Built Env.*)

1 Psychrometric Properties of Saturated Moist Air at 101.325 kPa (-60°C to 90°C)

Table 1: Tabulated values for the saturated properties of moist air at atmospheric pressure (101.325 kPa) from -60 to 0°C.

t °C	W_s kg _w /kg _a	ρ_s kg/m ³	$c_{p,s}$ kJ/(kg K)	η_s μPa s	ν_s 10 ⁻⁶ m ² /s	λ_s W/(m K)	Pr_s -
-60	0.000006684	1.6592	1.0062	14.07	8.478	0.01960	0.7223
-55	0.00001294	1.6209	1.0061	14.34	8.848	0.02001	0.7211
-50	0.00002432	1.5844	1.0059	14.61	9.224	0.02042	0.7200
-45	0.00004448	1.5494	1.0058	14.88	9.606	0.02082	0.7190
-40	0.00007927	1.5160	1.0058	15.15	9.994	0.02122	0.7180
-35	0.0001379	1.4839	1.0057	15.42	10.39	0.02162	0.7170
-30	0.0002345	1.4531	1.0058	15.68	10.79	0.02202	0.7161
-25	0.0003905	1.4236	1.0059	15.94	11.20	0.02241	0.7152
-20	0.0006373	1.3951	1.0061	16.19	11.61	0.02281	0.7144
-15	0.001021	1.3677	1.0064	16.45	12.03	0.02319	0.7137
-10	0.001606	1.3411	1.0069	16.70	12.45	0.02358	0.7131
-5	0.002486	1.3153	1.0078	16.94	12.88	0.02396	0.7127
0	0.003790	1.2902	1.0090	17.18	13.32	0.02433	0.7124

Table 2: Tabulated values for the saturated properties of moist air at atmospheric pressure (101.325 kPa) from 0 to 90°C.

t °C	W_s kg _w /kg _a	ρ_s kg/m ³	$c_{p,s}$ kJ/(kg K)	η_s μPa s	ν_s 10 ⁻⁶ m ² /s	λ_s W/(m K)	Pr_s -
0	0.003790	1.2902	1.0090	17.18	13.32	0.02433	0.7124
5	0.005425	1.2657	1.0105	17.41	13.76	0.02470	0.7124
10	0.007663	1.2416	1.0126	17.65	14.21	0.02507	0.7126
15	0.01069	1.2178	1.0153	17.87	14.67	0.02545	0.7131
20	0.01476	1.1941	1.0191	18.09	15.15	0.02582	0.7140
25	0.02017	1.1704	1.0240	18.31	15.65	0.02621	0.7155
30	0.02733	1.1464	1.0304	18.53	16.17	0.02661	0.7176
35	0.03676	1.1219	1.0388	18.76	16.72	0.02705	0.7205
40	0.04914	1.0966	1.0497	18.98	17.31	0.02751	0.7245
45	0.06542	1.0703	1.0637	19.20	17.94	0.02799	0.7298
50	0.08686	1.0426	1.0817	19.38	18.59	0.02844	0.7370
55	0.1153	1.0131	1.1047	19.48	19.23	0.02882	0.7466
60	0.1535	0.9816	1.1342	19.44	19.80	0.02903	0.7594
65	0.2058	0.9475	1.1719	19.20	20.26	0.02898	0.7762
70	0.2792	0.9105	1.2204	18.73	20.57	0.02867	0.7972
75	0.3864	0.8700	1.2829	18.07	20.77	0.02817	0.8230
80	0.5529	0.8256	1.3640	17.23	20.87	0.02753	0.8535
85	0.8381	0.7767	1.4704	16.11	20.74	0.02665	0.8888
90	1.4202	0.7227	1.6120	14.57	20.16	0.02535	0.9268

2 Transport and Thermodynamic Properties of Water at Saturation (0°C to 160°C)

Table 3: Tabulated values for the transport and thermodynamic properties of water at saturated liquid (liq) and saturated vapour (vap) states from 0 to 160°C.

t	$p_{w,s}$	ρ_{liq}	ρ_{vap}	$c_{p,liq}$	$c_{p,vap}$	η_{liq}	η_{vap}	λ_{liq}	λ_{vap}	ν_{liq}	ν_{vap}	Pr_{liq}	Pr_{vap}
°C	kPa	kg/m ³	kg/m ³	kJ/(kg K)	kJ/(kg K)	μPa s	μPa s	W/(m K)	W/(m K)	10 ⁻⁶ m ² /s	10 ⁻⁶ m ² /s	-	-
0	0.61121	999.79	0.00485	4.220	1.888	1792.0	8.945	1.792	1844	555.6	16.76	13.61	1.008
5	0.87257	999.92	0.00680	4.205	1.892	1518.3	9.090	1.518	1336	567.7	17.08	11.25	1.007
10	1.2282	999.65	0.00941	4.196	1.896	1306.0	9.238	1.306	982.1	578.7	17.41	9.469	1.006
15	1.7057	999.05	0.01284	4.189	1.900	1137.6	9.390	1.139	731.3	588.7	17.75	8.095	1.006
20	2.3392	998.16	0.01731	4.185	1.906	1001.6	9.544	1.003	551.3	598.0	18.09	7.010	1.006
25	3.1697	997.00	0.02307	4.182	1.912	890.0	9.701	0.8927	420.5	606.5	18.43	6.138	1.006
30	4.2467	995.61	0.03041	4.180	1.918	797.2	9.860	0.8007	324.2	614.3	18.79	5.425	1.007
35	5.6286	994.00	0.03967	4.179	1.925	719.1	10.02	0.7235	252.6	621.7	19.14	4.834	1.008
40	7.3844	992.18	0.05124	4.179	1.932	652.7	10.18	0.6579	198.8	628.4	19.51	4.340	1.009
45	9.5944	990.18	0.06556	4.179	1.940	595.8	10.35	0.6017	157.9	634.7	19.88	3.922	1.010
50	12.351	988.01	0.08314	4.180	1.948	546.5	10.52	0.5531	126.5	640.6	20.26	3.566	1.011
55	15.761	985.67	0.10455	4.181	1.957	503.6	10.68	0.5109	102.2	646.0	20.65	3.260	1.013
60	19.946	983.18	0.13042	4.183	1.966	466.0	10.85	0.4740	83.22	651.0	21.04	2.995	1.014
65	25.041	980.53	0.16145	4.185	1.976	432.9	11.02	0.4415	68.28	655.6	21.45	2.764	1.016
70	31.201	977.75	0.19842	4.188	1.987	403.5	11.19	0.4127	56.42	659.7	21.86	2.562	1.018
75	38.595	974.83	0.24218	4.192	1.999	377.4	11.37	0.3872	46.93	663.5	22.28	2.384	1.020
80	47.415	971.78	0.29366	4.196	2.012	354.0	11.54	0.3643	39.29	667.0	22.72	2.227	1.022
85	57.867	968.60	0.35387	4.200	2.026	333.1	11.71	0.3439	33.10	670.1	23.16	2.088	1.024
90	70.182	965.30	0.42388	4.205	2.042	314.2	11.89	0.3255	28.04	672.8	23.62	1.964	1.027
95	84.609	961.89	0.50489	4.211	2.059	297.1	12.06	0.3089	23.88	675.2	24.09	1.853	1.031
100	101.42	958.35	0.59814	4.217	2.077	281.6	12.23	0.2938	20.45	677.2	24.57	1.753	1.034
105	120.90	954.71	0.70498	4.223	2.098	267.5	12.41	0.2802	17.60	678.9	25.07	1.664	1.038
110	143.38	950.95	0.82686	4.230	2.121	254.6	12.58	0.2677	15.21	680.3	25.58	1.583	1.043
115	169.18	947.08	0.96531	4.238	2.146	242.8	12.75	0.2564	13.21	681.4	26.11	1.510	1.048
120	198.67	943.11	1.12195	4.246	2.174	232.0	12.93	0.2460	11.52	682.2	26.65	1.444	1.054
125	232.22	939.02	1.29851	4.255	2.204	222.1	13.10	0.2365	10.09	682.7	27.21	1.384	1.061
130	270.26	934.83	1.49682	4.265	2.237	212.9	13.27	0.2278	8.867	682.9	27.79	1.330	1.068
135	313.20	930.53	1.71880	4.275	2.273	204.5	13.45	0.2197	7.823	682.9	28.39	1.280	1.076
140	361.50	926.13	1.96649	4.286	2.311	196.6	13.62	0.2123	6.925	682.5	29.02	1.235	1.085
145	415.63	921.62	2.24206	4.298	2.352	189.4	13.79	0.2055	6.150	681.9	29.66	1.194	1.094
150	476.10	917.01	2.54776	4.310	2.396	182.6	13.96	0.1991	5.480	681.0	30.32	1.156	1.103
155	543.42	912.28	2.88598	4.324	2.442	176.3	14.13	0.1933	4.897	679.9	31.01	1.121	1.113
160	618.14	907.45	3.25926	4.338	2.492	170.4	14.30	0.1878	4.389	678.7	31.72	1.089	1.124

3 Thermodynamic Properties of Moist Air for 200°C

Table 4: Tabulated values for the properties of moist air at 101.325 kPa and 200°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	v m^3 / kg_a	h kJ / kg_a	s kJ / ($\text{kg}_a \text{ K}$)	c_p kJ / (kg K)
0.00	45.07	1.341	202.52	0.5558	1.0249
0.05	55.38	1.448	346.48	1.0298	1.0687
0.10	61.85	1.556	490.42	1.4734	1.1087
0.20	69.95	1.771	778.23	2.3332	1.1791
0.30	75.00	1.986	1065.99	3.1744	1.2390
0.40	78.51	2.201	1353.70	4.0049	1.2906
0.50	81.12	2.416	1641.37	4.8282	1.3355
0.60	83.14	2.630	1929.03	5.6462	1.3750
0.70	84.76	2.845	2216.67	6.4603	1.4098
0.80	86.09	3.060	2504.29	7.2713	1.4409
0.90	87.20	3.274	2791.90	8.0797	1.4687
1.00	88.15	3.489	3079.50	8.8860	1.4938

Table 5: Tabulated values for the properties of moist air at 1,000 kPa and 200°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	v m^3 / kg_a	h kJ / kg_a	s kJ / ($\text{kg}_a \text{ K}$)	c_p kJ / (kg K)
0.00	90.47	0.136	201.94	-0.1033	1.0298
0.05	107.30	0.147	345.59	0.3172	1.0751
0.10	117.69	0.158	488.96	0.7071	1.1184
0.20	130.61	0.179	775.05	1.4585	1.1989
0.30	138.66	0.200	1060.50	2.1903	1.2713
0.40	144.29	0.222	1345.49	2.9107	1.3366
0.50	148.49	0.243	1630.12	3.6234	1.3954
0.60	151.76	0.264	1914.48	4.3305	1.4486
0.70	154.39	0.284	2198.63	5.0333	1.4968
0.80	156.56	0.305	2482.61	5.7326	1.5407
0.90	158.37	0.326	2766.44	6.4292	1.5807
1.00	159.92	0.347	3050.16	7.1235	1.6174

Table 6: Tabulated values for the properties of moist air at 2,000 kPa and 200°C.

W	t_{wb}	v	h	s	c_p	φ
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$	$\%$
0.00	105.93	0.068	201.34	-0.3045	1.0351	0.0000
0.05	125.81	0.074	344.62	0.0995	1.0824	9.3474
0.10	138.03	0.079	487.32	0.4723	1.1299	17.4001
0.20	153.19	0.089	771.36	1.1883	1.2236	30.5663
0.30	162.65	0.100	1054.00	1.8836	1.3138	40.8763
0.40	169.28	0.110	1335.60	2.5664	1.3992	49.1686
0.50	174.23	0.120	1616.38	3.2407	1.4795	55.9827
0.60	178.11	0.130	1896.53	3.9088	1.5547	61.6816
0.70	181.23	0.140	2176.15	4.5720	1.6250	66.5182
0.80	183.81	0.150	2455.34	5.2314	1.6908	70.6745
0.90	185.98	0.160	2734.17	5.8876	1.7522	74.2847
1.00	187.83	0.169	3012.70	6.5412	1.8098	77.4497

Table 7: Tabulated values for the properties of moist air at 5,000 kPa and 200°C.

W	t_{wb}	v	h	s	c_p	φ
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$	$\%$
0.00	126.87	0.028	199.72	-0.5738	1.0506	0.0000
0.05	151.76	0.030	341.85	-0.1928	1.1045	21.5446
0.10	166.94	0.032	482.36	0.1552	1.1678	40.1050
0.15	177.63	0.034	621.46	0.4904	1.2391	56.2610
0.20	185.72	0.036	759.32	0.8172	1.3169	70.4514
0.25	192.15	0.037	896.06	1.1376	1.4002	83.0144
0.30	197.42	0.039	1031.79	1.4530	1.4884	94.2147

Table 8: Tabulated values for the properties of moist air at 10,000 kPa and 200°C.

W	t_{wb}	v	h	s	c_p	φ
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$	$\%$
0.00	142.19	0.014	197.66	-0.7823	1.0746	0.0000
0.05	171.31	0.015	337.69	-0.4208	1.1424	39.4628
0.10	188.92	0.016	473.91	-0.0960	1.2430	73.4594

4 Thermodynamic Properties of Moist Air (SI Units) for 320°C

Table 9: Tabulated values for the properties of moist air at 101.325 kPa and 320°C.

W	t_{wb}	v	h	s	c_p
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$
0.00	54.90	1.681	326.93	0.7901	1.0496
0.05	62.07	1.816	482.76	1.2863	1.0955
0.10	67.00	1.951	638.58	1.7523	1.1373
0.20	73.54	2.221	950.19	2.6569	1.2106
0.30	77.79	2.491	1261.77	3.5430	1.2727
0.40	80.80	2.761	1573.33	4.4184	1.3260
0.50	83.07	3.030	1884.88	5.2866	1.3722
0.60	84.85	3.300	2196.42	6.1496	1.4127
0.70	86.28	3.570	2507.95	7.0087	1.4485
0.80	87.46	3.840	2819.47	7.8647	1.4803
0.90	88.45	4.109	3130.99	8.7181	1.5087
1.00	89.29	4.379	3442.50	9.5694	1.5344

Table 10: Tabulated values for the properties of moist air at 1,000 kPa and 320°C.

W	t_{wb}	v	h	s	c_p
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$
0.00	107.70	0.171	326.80	0.1318	1.0525
0.05	118.99	0.185	482.46	0.5749	1.0990
0.10	126.74	0.198	637.98	0.9877	1.1418
0.20	137.03	0.225	948.75	1.7856	1.2181
0.30	143.73	0.252	1259.24	2.5646	1.2838
0.40	148.52	0.279	1569.52	3.3327	1.3409
0.50	152.14	0.306	1879.66	4.0935	1.3909
0.60	154.99	0.333	2189.68	4.8489	1.4350
0.70	157.29	0.360	2499.61	5.6003	1.4743
0.80	159.19	0.387	2809.48	6.3485	1.5094
0.90	160.79	0.414	3119.29	7.0941	1.5409
1.00	162.16	0.441	3429.06	7.8376	1.5695

Table 11: Tabulated values for the properties of moist air at 2,000 kPa and 320°C.

W	t_{wb}	v	h	s	c_p
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$
0.00	126.92	0.086	326.68	-0.0685	1.0556
0.05	140.12	0.093	482.14	0.3585	1.1028
0.10	149.17	0.099	637.34	0.7548	1.1469
0.20	161.20	0.113	947.15	1.5194	1.2267
0.30	169.07	0.126	1256.38	2.2648	1.2967
0.40	174.71	0.140	1565.20	2.9991	1.3584
0.50	178.98	0.153	1873.71	3.7258	1.4131
0.60	182.35	0.166	2181.98	4.4471	1.4618
0.70	185.08	0.179	2490.08	5.1641	1.5054
0.80	187.34	0.192	2798.02	5.8779	1.5447
0.90	189.25	0.206	3105.85	6.5890	1.5803
1.00	190.88	0.219	3413.58	7.2979	1.6126

Table 12: Tabulated values for the properties of moist air at 5,000 kPa and 320°C.

W	t_{wb}	v	h	s	c_p
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$
0.00	154.63	0.035	326.46	-0.3351	1.0648
0.05	170.97	0.037	481.31	0.0698	1.1140
0.10	182.17	0.040	635.49	0.4437	1.1622
0.20	197.14	0.045	942.29	1.1621	1.2541
0.30	206.99	0.050	1247.56	1.8601	1.3393
0.40	214.10	0.056	1551.70	2.5461	1.4177
0.50	219.52	0.061	1854.97	3.2238	1.4896
0.60	223.82	0.066	2157.58	3.8954	1.5556
0.70	227.33	0.071	2459.65	4.5624	1.6163
0.80	230.25	0.076	2761.29	5.2258	1.6722
0.90	232.72	0.081	3062.56	5.8861	1.7238
1.00	234.85	0.085	3363.54	6.5440	1.7715

Table 13: Tabulated values for the properties of moist air at 10,000 kPa and 320°C.

W	t_{wb}	v	h	s	c_p
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	m^3 / kg_a	kJ / kg_a	$\text{kJ} / (\text{kg}_a \text{ K})$	$\text{kJ} / (\text{kg K})$
0.00	176.72	0.018	326.51	-0.5397	1.0789
0.05	195.85	0.019	480.31	-0.1522	1.1320
0.10	209.00	0.020	632.69	0.2033	1.1881
0.20	226.64	0.023	934.10	0.8827	1.3049
0.30	238.33	0.025	1232.05	1.5391	1.4232
0.40	246.84	0.028	1527.36	2.1815	1.5403
0.50	253.40	0.030	1820.56	2.8139	1.6547
0.60	258.63	0.032	2112.02	3.4388	1.7659
0.70	262.94	0.034	2402.04	4.0578	1.8735
0.80	266.55	0.036	2690.81	4.6720	1.9774
0.90	269.63	0.039	2978.51	5.2822	2.0778
1.00	272.29	0.041	3265.27	5.8889	2.1747

5 Transport Properties of Moist Air (SI Units) for 200°C

Table 14: Tabulated values for the properties of moist air at 101.325 kPa and 200°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	η $\mu\text{Pa s}$	ν $10^6 \text{ m}^2 / \text{s}$	λ $\text{W} / (\text{m K})$	Pr -
0.00	45.07	26.05	34.92	0.03825	0.6980
0.05	55.38	26.05	35.93	0.03900	0.7138
0.10	61.85	26.06	36.87	0.03968	0.7281
0.20	69.95	25.34	37.40	0.03953	0.7557
0.30	75.00	24.35	37.19	0.03872	0.7790
0.40	78.51	23.48	36.92	0.03799	0.7979
0.50	81.12	22.77	36.68	0.03740	0.8133
0.60	83.14	22.17	36.45	0.03690	0.8261
0.70	84.76	21.64	36.21	0.03645	0.8369
0.80	86.09	21.15	35.96	0.03603	0.8460
0.90	87.20	20.72	35.70	0.03563	0.8538
1.00	88.15	20.32	35.44	0.03526	0.8606

Table 15: Tabulated values for the properties of moist air at 1,000 kPa and 200°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	η $\mu\text{Pa s}$	ν $10^6 \text{ m}^2 / \text{s}$	λ $\text{W} / (\text{m K})$	Pr -
0.00	90.47	26.14	3.561	0.03842	0.7006
0.05	107.30	26.11	3.657	0.03921	0.7157
0.10	117.69	26.09	3.744	0.03994	0.7307
0.20	130.61	25.32	3.781	0.03985	0.7616
0.30	138.66	24.29	3.745	0.03910	0.7896
0.40	144.29	23.39	3.702	0.03844	0.8134
0.50	148.49	22.66	3.665	0.03794	0.8334
0.60	151.76	22.04	3.630	0.03754	0.8505
0.70	154.39	21.49	3.596	0.03718	0.8652
0.80	156.56	20.99	3.561	0.03685	0.8778
0.90	158.37	20.54	3.527	0.03654	0.8888
1.00	159.92	20.13	3.493	0.03625	0.8983

Table 16: Tabulated values for the properties of moist air at 2,000 kPa and 200°C.

W kg _w / kg _a	t_{wb} °C	η μPa s	ν 10 ⁶ m ² / s	λ W / (m K)	Pr -	φ %
0.00	105.93	26.25	1.7938	0.03864	0.7032	0.0000
0.05	125.81	26.18	1.8383	0.03946	0.7183	9.3474
0.10	138.03	26.14	1.8780	0.04021	0.7346	17.4001
0.20	153.19	25.32	1.8880	0.04017	0.7713	30.5663
0.30	162.65	24.26	1.8612	0.03947	0.8074	40.8763
0.40	169.28	23.34	1.8322	0.03887	0.8401	49.1686
0.50	174.23	22.59	1.8064	0.03844	0.8693	55.9827
0.60	178.11	21.95	1.7826	0.03812	0.8953	61.6816
0.70	181.23	21.39	1.7596	0.03784	0.9185	66.5182
0.80	183.81	20.88	1.7371	0.03759	0.9393	70.6745
0.90	185.98	20.42	1.7153	0.03735	0.9580	74.2847
1.00	187.83	20.01	1.6944	0.03714	0.9749	77.4497

Table 17: Tabulated values for the properties of moist air at 5,000 kPa and 200°C.

W kg _w / kg _a	t_{wb} °C	η μPa s	ν 10 ⁶ m ² / s	λ W / (m K)	Pr -	φ %
0.00	126.87	26.59	0.7348	0.03935	0.7100	0.0000
0.05	151.76	26.50	0.7502	0.04015	0.7289	21.5446
0.10	166.94	26.43	0.7627	0.04092	0.7544	40.1050
0.15	177.63	26.08	0.7641	0.04109	0.7864	56.2610
0.20	185.72	25.56	0.7581	0.04090	0.8230	70.4514
0.25	192.15	25.00	0.7486	0.04058	0.8627	83.0144
0.30	197.42	24.46	0.7381	0.04025	0.9045	94.2147

Table 18: Tabulated values for the properties of moist air at 10,000 kPa and 200°C.

W kg _w / kg _a	t_{wb} °C	η μPa s	ν 10 ⁶ m ² / s	λ W / (m K)	Pr -	φ %
0.00	142.19	27.22	0.3839	0.04074	0.7180	0.0000
0.05	171.31	27.10	0.3897	0.04155	0.7451	39.4628
0.10	188.92	27.02	0.3932	0.04241	0.7919	73.4594

6 Transport Properties of Moist Air (SI Units) for 300°C

Table 19: Tabulated values for the properties of moist air at 101.325 kPa and 300°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	η $\mu\text{Pa s}$	ν $10^6 \text{ m}^2 / \text{s}$	λ $\text{W} / (\text{m K})$	Pr -
0.00	53.56	29.81	48.42	0.04442	0.7014
0.05	61.11	29.92	50.01	0.04561	0.7155
0.10	66.24	30.05	51.50	0.04672	0.7283
0.20	73.00	29.42	52.61	0.04705	0.7533
0.30	77.36	28.43	52.63	0.04648	0.7746
0.40	80.45	27.56	52.51	0.04593	0.7916
0.50	82.77	26.85	52.40	0.04550	0.8055
0.60	84.59	26.23	52.28	0.04513	0.8170
0.70	86.05	25.69	52.12	0.04479	0.8266
0.80	87.25	25.19	51.92	0.04444	0.8348
0.90	88.26	24.74	51.69	0.04411	0.8418
1.00	89.11	24.32	51.44	0.04379	0.8478

Table 20: Tabulated values for the properties of moist air at 1,000 kPa and 300°C.

W $\text{kg}_w / \text{kg}_a$	t_{wb} °C	η $\mu\text{Pa s}$	ν $10^6 \text{ m}^2 / \text{s}$	λ $\text{W} / (\text{m K})$	Pr -
0.00	105.39	29.89	4.935	0.04456	0.7031
0.05	117.33	29.99	5.092	0.04571	0.7180
0.10	125.42	30.10	5.239	0.04679	0.7316
0.20	136.07	29.45	5.341	0.04709	0.7587
0.30	142.97	28.44	5.333	0.04652	0.7822
0.40	147.89	27.56	5.311	0.04598	0.8012
0.50	151.59	26.83	5.292	0.04557	0.8168
0.60	154.50	26.21	5.272	0.04523	0.8297
0.70	156.85	25.66	5.249	0.04492	0.8406
0.80	158.79	25.16	5.223	0.04461	0.8498
0.90	160.43	24.70	5.194	0.04431	0.8577
1.00	161.82	24.27	5.164	0.04403	0.8644

Table 21: Tabulated values for the properties of moist air at 2,000 kPa and 300°C.

W	t_{wb}	η	ν	λ	Pr
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	$\mu\text{Pa s}$	$10^6 \text{ m}^2 / \text{s}$	$\text{W} / (\text{m K})$	-
0.00	124.12	29.98	2.484	0.04473	0.7049
0.05	138.10	30.06	2.561	0.04584	0.7205
0.10	147.55	30.17	2.632	0.04690	0.7351
0.20	160.02	29.48	2.677	0.04716	0.7646
0.30	168.12	28.46	2.667	0.04658	0.7907
0.40	173.90	27.56	2.651	0.04606	0.8122
0.50	178.28	26.82	2.636	0.04568	0.8300
0.60	181.73	26.19	2.622	0.04538	0.8448
0.70	184.52	25.63	2.607	0.04511	0.8573
0.80	186.83	25.12	2.590	0.04484	0.8681
0.90	188.78	24.66	2.573	0.04458	0.8773
1.00	190.44	24.23	2.555	0.04434	0.8852

Table 22: Tabulated values for the properties of moist air at 5,000 kPa and 300°C.

W	t_{wb}	η	ν	λ	Pr
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	$\mu\text{Pa s}$	$10^6 \text{ m}^2 / \text{s}$	$\text{W} / (\text{m K})$	-
0.00	150.95	30.26	1.015	0.04528	0.7094
0.05	168.27	30.30	1.043	0.04632	0.7268
0.10	180.00	30.37	1.068	0.04734	0.7441
0.20	195.50	29.62	1.079	0.04757	0.7816
0.30	205.63	28.54	1.068	0.04700	0.8168
0.40	212.91	27.60	1.055	0.04653	0.8475
0.50	218.46	26.83	1.044	0.04626	0.8739
0.60	222.86	26.18	1.033	0.04608	0.8968
0.70	226.44	25.60	1.022	0.04594	0.9169
0.80	229.42	25.07	1.011	0.04581	0.9345
0.90	231.95	24.58	1.000	0.04569	0.9500
1.00	234.12	24.14	0.9893	0.04558	0.9638

Table 23: Tabulated values for the properties of moist air at 10,000 kPa and 300°C.

W	t_{wb}	η	ν	λ	Pr
$\text{kg}_w / \text{kg}_a$	$^{\circ}\text{C}$	$\mu\text{Pa s}$	$10^6 \text{ m}^2 / \text{s}$	$\text{W} / (\text{m K})$	-
0.00	172.15	30.76	0.5266	0.04636	0.7145
0.05	192.44	30.75	0.5387	0.04738	0.7339
0.10	206.18	30.77	0.5491	0.04843	0.7557
0.20	224.40	29.93	0.5487	0.04874	0.8081
0.30	236.39	28.79	0.5372	0.04830	0.8632
0.40	245.07	27.79	0.5250	0.04804	0.9158
0.50	251.74	26.98	0.5138	0.04804	0.9652
0.60	257.06	26.29	0.5034	0.04816	1.0115
0.70	261.42	25.67	0.4933	0.04835	1.0552
0.80	265.08	25.12	0.4836	0.04856	1.0964
0.90	268.20	24.62	0.4743	0.04877	1.1354
1.00	270.90	24.16	0.4654	0.04899	1.1726