

TABLE 6. PROPERTIES OF SATURATED WATER VAPOR WITH AIR, 0 F TO 200 Fa (PART II)

Temp, F	PRESSURE OF SATURATED VAPOR		WEIGHT OF SATURATED VAPOR				VOLUME IN Cu Ft BAROMETER, 29.92 IN. Hg.		ENTHALPY PER LB		
	In. of Hg.	Lb per Sq. In.	per Cu Ft		per lb of Dry Air		of 1 lb of Dry Air	of 1 lb of Dry Air + Vapor to Saturate it	Dry Air 0 F Datum	Vapor 32 F Datum	Dry Air with Vapor to Saturate it
			Pounds	Grains	Pounds	Grains					
0	0.03773	0.01853	0.000067914	0.475	0.0007352	5.50	11.58	11.59	0.0000	1059.2	0.8317
1	0.03975	0.01953	0.000071395	0.500	0.0008275	5.70	11.60	11.62	0.0000	1059.7	1.117
2	0.04166	0.02056	0.000075021	0.525	0.0009176	5.90	11.63	11.64	0.0000	1060.1	1.404
3	0.04356	0.02166	0.000078851	0.552	0.0009917	6.10	11.65	11.67	0.0000	1060.6	1.694
4	0.04545	0.02282	0.000082890	0.580	0.0010671	6.37	11.68	11.70	0.0001	1061.0	1.986
5	0.04886	0.02400	0.000087005	0.609	0.0010117	7.12	11.70	11.72	0.0001	1061.5	2.280
6	0.05144	0.02558	0.000091399	0.640	0.0010701	7.50	11.73	11.75	0.0001	1061.9	2.577
7	0.05412	0.02706	0.000096555	0.672	0.0011277	7.89	11.75	11.77	0.0001	1062.4	2.877
8	0.05688	0.02796	0.000100770	0.705	0.0011860	8.30	11.78	11.80	0.0001	1062.8	3.180
9	0.05968	0.02941	0.00010572	0.740	0.001247	8.73	11.80	11.83	0.0001	1063.3	3.486
10	0.06295	0.03092	0.00011090	0.776	0.001311	9.18	11.83	11.85	0.0001	1063.7	3.795
11	0.06618	0.03251	0.00011634	0.814	0.001376	9.65	11.88	11.88	0.0001	1064.2	4.108
12	0.06938	0.03418	0.00012208	0.854	0.001453	10.15	11.88	11.91	0.0001	1064.6	4.424
13	0.07309	0.03598	0.00012794	0.896	0.001523	10.68	11.91	11.93	0.0001	1065.1	4.742
14	0.07677	0.03771	0.00013410	0.939	0.001600	11.20	11.93	11.96	0.0001	1065.5	5.064
15	0.08087	0.03963	0.00014062	0.984	0.001682	11.77	11.96	11.99	0.0001	1066.0	5.392
16	0.08469	0.04166	0.00014732	1.031	0.001766	12.36	11.98	12.01	0.0001	1066.4	5.722
17	0.08895	0.04389	0.00015440	1.081	0.001855	12.99	12.00	12.04	0.0001	1066.9	6.058
18	0.09367	0.04636	0.00016174	1.132	0.001947	13.63	12.03	12.07	0.0001	1067.3	6.397
19	0.09787	0.04812	0.00016935	1.185	0.002043	14.30	12.06	12.09	0.0001	1067.8	6.741
20	0.1028	0.05060	0.00017747	1.242	0.002144	15.01	12.08	12.12	0.0001	1068.2	7.088
21	0.1078	0.05295	0.00018594	1.299	0.002250	15.75	12.11	12.15	0.0001	1068.7	7.443
22	0.1132	0.05560	0.00019439	1.361	0.002362	16.53	12.13	12.18	0.0001	1069.1	7.802
23	0.1186	0.05826	0.00020335	1.425	0.002476	17.33	12.16	12.20	0.0001	1069.6	8.166
24	0.1244	0.06111	0.00021276	1.489	0.002596	18.17	12.18	12.23	0.0001	1070.0	8.530
25	0.1304	0.06405	0.00022255	1.558	0.002722	19.05	12.21	12.26	0.0001	1070.5	8.912
26	0.1366	0.06710	0.00023278	1.629	0.002853	19.97	12.23	12.29	0.0001	1070.9	9.292
27	0.1430	0.07034	0.00024342	1.704	0.002991	20.94	12.26	12.32	0.0001	1071.4	9.682
28	0.1498	0.07368	0.00025445	1.781	0.003133	21.93	12.28	12.35	0.0001	1071.8	10.075
29	0.1571	0.07717	0.00026597	1.862	0.003283	22.99	12.31	12.37	0.0001	1072.3	10.477
30	0.1645	0.08080	0.00027797	1.946	0.003439	24.07	12.33	12.40	0.0001	1072.7	10.886
31	0.1722	0.08458	0.00029043	2.033	0.003599	25.21	12.36	12.43	0.0001	1073.2	11.302
32	0.1803	0.08856	0.00030343	2.123	0.003771	26.40	12.38	12.46	0.0001	1073.6	11.726
33	0.1879	0.09230	0.00031741	2.213	0.003931	27.52	12.41	12.49	0.0001	1074.1	12.156
34	0.1957	0.09610	0.00033190	2.298	0.004094	28.66	12.43	12.51	0.0001	1074.5	12.586

*Compiled by W. M. Sawdon, vapor pressures converted from International Critical Tables.

TABLE 6. PROPERTIES OF SATURATED WATER VAPOR WITH AIR, 0 F TO 200 Fa (PART II, CONTINUED)

Temp, F	PRESSURE OF SATURATED VAPOR		WEIGHT OF SATURATED VAPOR				VOLUME IN Cu Ft BAROMETER, 29.92 IN. Hg.		ENTHALPY PER LB		
	In. of Hg.	Lb per Sq. In.	per Cu Ft		per lb of Dry Air		of 1 lb of Dry Air	of 1 lb of Dry Air + Vapor to Saturate it	Dry Air 0 F Datum	Vapor 32 F Datum	Dry Air with Vapor to Saturate it
			Pounds	Grains	Pounds	Grains					
35	0.20360	0.1000	0.0003394	2.376	0.004292	29.83	12.46	12.54	8.337	1075.0	12.979
36	0.21195	0.1041	0.0003527	2.469	0.004438	31.07	12.48	12.57	8.636	1075.4	13.409
37	0.22050	0.1083	0.0003662	2.563	0.004618	32.33	12.51	12.63	8.976	1075.9	13.845
38	0.22924	0.1126	0.0003799	2.660	0.004803	33.62	12.53	12.68	9.356	1076.3	14.285
39	0.23842	0.1171	0.0003943	2.760	0.004996	34.97	12.56	12.69	9.777	1076.8	14.735
40	0.24775	0.1217	0.0004090	2.863	0.005194	36.36	12.59	12.69	10.208	1077.2	15.191
41	0.25755	0.1265	0.0004243	2.970	0.005401	37.80	12.61	12.72	10.677	1077.7	15.657
42	0.26773	0.1315	0.0004401	3.081	0.005616	39.31	12.64	12.75	11.178	1078.1	16.137
43	0.27832	0.1367	0.0004566	3.196	0.005840	40.88	12.68	12.78	11.703	1078.6	16.622
44	0.28911	0.1420	0.0004735	3.315	0.006069	42.48	12.69	12.81	12.251	1079.0	17.111
45	0.30031	0.1475	0.0004909	3.438	0.006306	44.14	12.71	12.84	12.80	1079.5	17.61
46	0.31191	0.1532	0.0005088	3.562	0.006553	45.87	12.74	12.87	13.38	1079.9	18.12
47	0.32393	0.1591	0.0005274	3.692	0.006808	47.66	12.76	12.90	13.98	1080.4	18.64
48	0.33635	0.1652	0.0005465	3.828	0.007072	49.50	12.79	12.93	14.60	1080.9	19.16
49	0.34917	0.1715	0.0005663	3.964	0.007345	51.42	12.81	12.96	15.25	1081.3	19.70
50	0.36241	0.1780	0.0005866	4.106	0.007629	53.38	12.84	12.99	15.93	1081.7	20.25
51	0.37625	0.1848	0.0006078	4.255	0.007923	55.45	12.86	13.02	16.64	1082.2	20.80
52	0.39051	0.1918	0.0006296	4.407	0.008224	57.53	12.89	13.06	17.38	1082.6	21.38
53	0.40496	0.1989	0.0006516	4.561	0.008534	59.74	12.91	13.09	18.15	1083.1	21.95
54	0.42003	0.2063	0.0006746	4.722	0.008856	61.99	12.94	13.12	18.95	1083.5	22.55
55	0.43570	0.2140	0.0006984	4.889	0.009192	64.34	12.96	13.15	19.78	1084.0	23.15
56	0.45178	0.2219	0.0007228	5.060	0.009536	66.75	12.99	13.19	20.64	1084.4	23.77
57	0.46828	0.2300	0.0007477	5.234	0.009890	69.22	13.01	13.22	21.53	1084.9	24.40
58	0.48538	0.2384	0.0007735	5.415	0.01026	71.82	13.04	13.25	22.45	1085.3	25.05
59	0.50310	0.2471	0.0008003	5.602	0.01064	74.48	13.06	13.29	23.40	1085.8	25.70
60	0.52142	0.2561	0.0008278	5.795	0.01103	77.21	13.09	13.32	24.38	1086.2	26.37
61	0.54035	0.2654	0.0008562	5.993	0.01144	80.08	13.11	13.35	25.39	1086.7	27.06
62	0.55970	0.2749	0.0008852	6.198	0.01186	83.02	13.14	13.39	26.43	1087.1	27.76
63	0.57955	0.2848	0.0009153	6.407	0.01229	86.02	13.16	13.42	27.50	1087.6	28.48
64	0.60042	0.2949	0.0009460	6.622	0.01274	89.18	13.19	13.46	28.60	1088.0	29.21
65	0.62179	0.3054	0.0009778	6.845	0.01320	92.40	13.21	13.49	29.73	1088.5	29.96
66	0.64378	0.3163	0.010105	7.074	0.01368	95.76	13.24	13.53	30.89	1089.0	30.73
67	0.66638	0.3274	0.010440	7.308	0.01417	99.19	13.26	13.57	32.07	1089.4	31.51
68	0.68980	0.3388	0.010816	7.571	0.01468	102.8	13.29	13.60	33.28	1089.9	32.31
69	0.71382	0.3500	0.011140	7.798	0.01520	106.4	13.31	13.64	34.52	1090.3	33.12

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