

TABLE 5. MIXTURES OF AIR AND SATURATED WATER VAPOR (CONTINUED)

Temp., ° F	PRESSURE OF SATURATED VAPOR		WEIGHT OF SATURATED VAPOR				VOLUME IN CU FT		HEAT CONTENT IN BTU OF 1 LB OF DRY AIR ABOVE 0 F	LATENT HEAT OF VAPOR, BTU	HEAT CONTENT IN BTU OF 1 LB OF DRY AIR WITH VAPOR TO SATU- RATE IT
	In. of Hg	Lb per Sq In.	per Cu Ft		per lb of Dry Air	of 1 lb of Dry Air + Vapor to Saturate It					
			Pounds	Grains			Pounds	Grains			
75	0.8744	0.4295	0.001352	9.46	0.01877	131.4	13.48	13.88	18.11	19.71	37.81
76	0.9040	0.4440	0.001395	9.76	0.01942	135.9	13.50	13.92	18.35	20.38	38.73
77	0.9345	0.4590	0.001439	10.07	0.02010	140.7	13.53	13.96	18.59	21.08	39.67
78	0.9658	0.4744	0.001485	10.39	0.02080	145.6	13.55	14.00	18.84	21.80	40.64
79	0.9981	0.4903	0.001532	10.72	0.02152	150.6	13.58	14.05	19.08	22.55	41.63
80	1.0314	0.5066	0.001580	11.06	0.02226	155.8	13.60	14.09	19.32	23.31	42.64
81	1.0656	0.5234	0.001629	11.40	0.02303	161.2	13.63	14.13	19.56	24.11	43.67
82	1.1008	0.5406	0.001680	11.76	0.02381	166.7	13.65	14.17	19.80	24.92	44.72
83	1.1370	0.5584	0.001732	12.12	0.02463	172.4	13.68	14.22	20.04	25.76	45.80
84	1.174	0.5767	0.001786	12.50	0.02547	178.3	13.70	14.26	20.29	26.62	46.91
85	1.212	0.5955	0.001841	12.89	0.02634	184.4	13.73	14.31	20.53	27.51	48.04
86	1.251	0.6148	0.001897	13.28	0.02723	190.6	13.75	14.35	20.77	28.43	49.20
87	1.292	0.6347	0.001955	13.68	0.02815	197.0	13.78	14.40	21.01	29.38	50.39
88	1.334	0.6551	0.002014	14.10	0.02910	203.7	13.80	14.45	21.25	30.35	51.61
89	1.377	0.6761	0.002075	14.53	0.03008	210.6	13.83	14.50	21.50	31.36	52.86
90	1.421	0.6977	0.002137	14.96	0.03109	217.6	13.86	14.55	21.74	32.39	54.13
91	1.466	0.7200	0.002201	15.41	0.03213	224.9	13.88	14.60	21.98	33.46	55.44
92	1.512	0.7427	0.002267	15.87	0.03320	232.4	13.91	14.65	22.22	34.59	56.78
93	1.560	0.7660	0.002334	16.34	0.03430	240.1	13.93	14.70	22.46	35.69	58.15
94	1.609	0.7901	0.002403	16.82	0.03544	247.1	13.96	14.75	22.71	36.86	59.56
95	1.659	0.8148	0.002474	17.32	0.03662	256.3	13.98	14.80	22.95	38.06	61.01
96	1.710	0.8401	0.002546	17.82	0.03783	264.8	14.01	14.86	23.19	39.30	62.48
97	1.763	0.8662	0.002621	18.35	0.03908	273.6	14.03	14.91	23.43	40.57	64.00
98	1.818	0.8929	0.002697	18.88	0.04036	282.5	14.06	14.97	23.67	41.88	65.55
99	1.874	0.9204	0.002775	19.42	0.04169	291.8	14.08	15.02	23.91	43.24	67.15
100	1.931	0.9486	0.002855	19.98	0.04305	301.3	14.11	15.08	24.16	44.63	68.79
101	1.990	0.9775	0.002937	20.56	0.04446	311.2	14.14	15.14	24.40	46.07	70.47
102	2.051	1.0072	0.003021	21.15	0.04591	321.4	14.16	15.20	24.64	47.54	72.18
103	2.113	1.0376	0.003107	21.75	0.04741	331.9	14.19	15.26	24.88	49.07	73.95
104	2.176	1.0689	0.003195	22.36	0.04895	342.7	14.21	15.33	25.13	50.64	75.77

^aReprinted by permission from *Properties of Steam and Ammonia*, by the late G. A. Goodenough.
^bValues in this column do not include the heat of the liquid.

TABLE 5. MIXTURES OF AIR AND SATURATED WATER VAPOR (CONTINUED)

TABLE 6. MIXTURES OF AIR AND SATURATED WATER VAPOR* (CONTINUED)											
TEMP., °F	PRESSURE OF SATURATED VAPOR		WEIGHT OF SATURATED VAPOR				VOLUME IN CU FT		HEAT CONTENT IN BTU OF 1 LB OF DRY AIR AT 50°F	LATENT HEAT OF VAPOR, BTU	HEAT CONTENT IN BTU OF 1 LB OF DRY AIR WITH VAPOR TO SATU- RATE IT
	In. of Hg	Lb per Sq In.	per Cu Ft		per lb of Dry Air		of 1 lb of Dry Air + Vapor to Saturate It				
			Pounds	Grains	Pounds	Grains					
105	2.241	1.1010	0.003285	22.99	0.0505	354	14.24	15.39	25.37	52.26	77.63
106	2.308	1.134	0.003377	23.64	0.0522	365	14.26	15.46	25.61	53.92	79.53
107	2.377	1.168	0.003472	24.30	0.0539	377	14.29	15.52	25.85	55.64	81.49
108	2.448	1.202	0.003568	24.98	0.0556	389	14.31	15.59	26.09	57.41	83.50
109	2.520	1.238	0.003667	25.67	0.0574	402	14.34	15.66	26.33	59.23	85.57
110	2.594	1.274	0.003769	26.38	0.0593	415	14.36	15.73	26.58	61.11	87.69
111	2.670	1.311	0.003873	27.11	0.0612	428	14.39	15.80	26.82	63.04	89.86
112	2.748	1.350	0.003979	27.85	0.0631	442	14.41	15.87	27.06	65.04	92.10
113	2.827	1.389	0.004087	28.61	0.0652	456	14.44	15.95	27.30	67.10	94.40
114	2.909	1.429	0.004198	29.39	0.0673	471	14.46	16.02	27.55	69.22	96.77
115	2.993	1.470	0.004312	30.18	0.0694	486	14.49	16.10	27.79	71.40	99.10
116	3.079	1.512	0.004428	31.00	0.0717	502	14.52	16.18	28.03	73.65	101.68
117	3.167	1.555	0.004547	31.83	0.0739	518	14.54	16.26	28.27	75.97	104.24
118	3.257	1.600	0.004669	32.68	0.0763	534	14.57	16.35	28.51	78.36	106.87
119	3.349	1.645	0.004793	33.55	0.0788	551	14.59	16.43	28.76	80.80	109.56
120	3.444	1.692	0.004920	34.44	0.0813	569	14.62	16.52	29.00	83.37	112.37
125	3.952	1.941	0.005599	39.19	0.0953	667	14.75	16.99	30.21	97.33	127.54
130	4.523	2.221	0.006356	44.49	0.1114	780	14.88	17.53	31.42	113.64	145.06
135	5.163	2.536	0.007197	50.38	0.1305	913	15.00	18.13	32.63	132.71	165.34
140	5.878	2.887	0.008130	56.91	0.1532	1072	15.13	18.84	33.85	155.37	189.22
145	6.677	3.280	0.00916	64.1	0.1800	1260	15.26	19.64	35.06	182.05	217.1
150	7.566	3.716	0.01030	72.1	0.2122	1485	15.39	20.60	36.27	214.03	250.3
155	8.554	4.201	0.01156	80.9	0.2511	1758	15.52	21.73	37.48	252.61	290.1
160	9.649	4.739	0.01294	90.6	0.2987	2091	15.64	23.09	38.69	299.55	338.2
165	10.860	5.334	0.01445	101.1	0.3577	2504	15.77	24.75	39.91	357.75	397.7
170	12.20	5.990	0.01611	112.8	0.4324	3024	15.90	26.84	41.12	431.2	472.3
175	13.67	6.71	0.01793	125.5	0.5290	3677	16.03	29.51	42.33	526.0	568.3
180	15.29	7.51	0.01991	139.4	0.6577	4519	16.16	33.04	43.55	651.9	695.5
185	17.07	8.38	0.02206	154.4	0.8359	5628	16.28	37.89	44.76	826.1	870.9
190	19.01	9.34	0.02441	170.9	1.0985	7041	16.41	45.00	45.97	1082.3	1128.3
200	23.46	11.53	0.02972	208.0	2.2953	10667	16.67	77.24	48.40	2247.5	2296

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