

Tabelle A1 Eigenschaften von Wasser und Wasserdampf

Tabelle A1. Sättigungszustand (Temperaturtafel)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
t	p	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
°C	kPa	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
0.01	0.6113	0.001	206.14	0	2375.3	2375.3	0.01	2501.3	2501.4	0	9.1562	9.1562
5	0.8721	0.001	147.12	20.97	2361.3	2382.3	20.98	2489.6	2510.6	0.0761	8.9496	9.0257
10	1.2276	0.001	106.38	42	2347.2	2389.2	42.01	2477.7	2519.8	0.151	8.7498	8.9008
15	1.7051	0.001001	77.93	62.99	2333.1	2396.1	62.99	2465.9	2528.9	0.2245	8.5569	8.7814
20	2.339	0.001002	57.79	83.95	2319	2402.9	83.96	2454.1	2538.1	0.2966	8.3706	8.6672
25	3.169	0.001003	43.36	104.88	2304.9	2409.8	104.89	2442.3	2547.2	0.3674	8.1905	8.558
30	4.246	0.001004	32.89	125.78	2290.8	2416.6	125.79	2430.5	2556.3	0.4369	8.0164	8.4533
35	5.628	0.001006	25.22	146.67	2276.7	2423.4	146.68	2418.6	2565.3	0.5053	7.8478	8.3531
40	7.384	0.001008	19.52	167.56	2262.6	2430.1	167.57	2406.7	2574.3	0.5725	7.6845	8.257
45	9.593	0.00101	15.26	188.44	2248.4	2436.8	188.45	2394.8	2583.2	0.6387	7.5261	8.1648
50	12.349	0.001012	12.03	209.32	2234.2	2443.5	209.33	2382.7	2592.1	0.7038	7.3725	8.0763
55	15.758	0.001015	9.568	230.21	2219.9	2450.1	230.23	2370.7	2600.9	0.7679	7.2234	7.9913
60	19.94	0.001017	7.671	251.11	2205.5	2456.6	251.13	2358.5	2609.6	0.8312	7.0784	7.9069
65	25.03	0.00102	6.197	272.02	2191.1	2463.1	272.06	2346.2	2618.3	0.8935	6.9375	7.831
70	31.19	0.001023	5.042	292.95	2176.6	2469.6	292.98	2333.8	2626.8	0.9549	6.8004	7.7553
75	38.58	0.001026	4.131	313.9	2162	2475.9	313.93	2321.4	2635.3	1.0155	6.6669	7.6824
80	47.39	0.001029	3.407	334.86	2147.4	2482.2	334.91	2308.8	2643.7	1.0753	6.5369	7.6122
85	57.83	0.001033	2.828	355.84	2132.6	2488.4	355.9	2296	2651.9	1.1343	6.4102	7.5445
90	70.14	0.001036	2.361	376.85	2117.7	2494.5	376.92	2283.2	2660.1	1.1925	6.2866	7.4791
95	84.55	0.00104	1.982	397.88	2102.7	2500.6	397.96	2270.2	2668.1	1.25	6.1659	7.4159
t	p	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
°C	MPa	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
100	0.10135	0.001044	1.6729	418.94	2087.6	2506.5	419.04	2257	2676.1	1.3069	6.048	7.3549
105	0.12082	0.001048	1.4194	440.02	2072.3	2512.4	440.15	2243.7	2683.8	1.363	5.9328	7.2958
110	0.14327	0.001052	1.2102	461.14	2057	2518.1	461.3	2230.2	2691.5	1.4185	5.8202	7.2387
115	0.16906	0.001056	1.0366	482.3	2041.4	2523.7	482.48	2216.5	2699	1.4734	5.71	7.1833
120	0.19853	0.00106	0.8919	503.5	2025.8	2529.3	503.71	2202.6	2706.3	1.5276	5.602	7.1296

Tabelle A1.1 Sättigungszustand (Temperaturtafel) (Fortsetzung)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
t	p	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
°C	MPa	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
125	0.2321	0.001065	0.7706	524.74	2009.9	2534.6	524.99	2188.5	2713.5	1.5813	5.4962	7.0775
130	0.2701	0.00107	0.6685	546.02	1993.9	2539.9	546.31	2174.2	2720.5	1.6344	5.3925	7.0269
135	0.313	0.001075	0.5822	567.35	1977.7	2545	567.69	2159.6	2727.3	1.687	5.2907	6.9777
140	0.3613	0.00108	0.5089	588.74	1961.3	2550	589.13	2144.7	2733.9	1.7391	5.1908	6.9299
145	0.4154	0.001085	0.4463	610.18	1944.7	2554.9	610.63	2129.6	2740.3	1.7907	5.0926	6.8833
150	0.4758	0.001091	0.3928	631.68	1927.9	2559.5	632.2	2114.3	2746.5	1.8418	4.996	6.8379
155	0.5431	0.001096	0.3468	653.24	1910.8	2564.1	653.84	2098.6	2752.4	1.8925	4.901	6.7935
160	0.6178	0.001102	0.3071	674.87	1893.5	2568.4	675.55	2082.6	2758.1	1.9427	4.8075	6.7502
165	0.7005	0.001108	0.2727	696.56	1876	2572.5	697.34	2066.2	2763.5	1.9925	4.7153	6.7078
170	0.7917	0.001114	0.2428	718.33	1858.1	2576.5	719.21	2049.5	2768.7	2.0419	4.6244	6.6663
175	0.892	0.001121	0.2168	740.17	1840	2580.2	741.17	2032.4	2773.6	2.0909	4.5347	6.6256
180	1.0021	0.001127	0.19405	762.09	1821.6	2583.7	763.22	2015	2778.2	2.1396	4.4461	6.5857
185	1.1227	0.001134	0.17409	784.1	1802.9	2587.2	785.37	1997.1	2782.4	2.1879	4.3586	6.5465
190	1.2544	0.001141	0.15654	806.19	1783.8	2590	807.62	1978.8	2786.4	2.2359	4.272	6.5079
195	1.3978	0.001149	0.14105	828.37	1764.4	2592.8	829.98	1960	2790	2.2835	4.1863	6.4698
200	1.5538	0.001157	0.12736	850.65	1744.7	2595.3	852.45	1940.7	2793.2	2.3309	4.1014	6.4323
205	1.723	0.001164	0.11521	873.04	1724.5	2597.5	875.04	1921	2796	2.378	4.0172	6.3952
210	1.9062	0.001173	0.10441	895.53	1703.9	2599.5	897.76	1900.7	2798.5	2.4248	3.9337	6.3585
215	2.104	0.001181	0.09479	918.14	1682.9	2601.1	920.62	1879.9	2800.5	2.4714	3.8507	6.3221
220	2.318	0.00119	0.08619	940.87	1661.5	2602.4	943.62	1858.5	2802.1	2.5178	3.7683	6.2861
225	2.548	0.001199	0.07849	963.73	1639.6	2603.3	966.78	1836.5	2803.3	2.5639	3.6863	6.2503
230	2.795	0.001209	0.07158	986.74	1617.2	2603.9	990.12	1813.8	2804	2.6099	3.6047	6.2146
235	3.06	0.001219	0.06537	1009.89	1594.2	2604.1	1013.62	1790.5	2804.2	2.6558	3.5233	6.1791
240	3.344	0.001229	0.05976	1033.21	1570.8	2604	1037.32	1766.5	2803.8	2.7015	3.4422	6.1437
245	3.648	0.00124	0.05471	1056.71	1546.7	2603.4	1061.23	1741.7	2803	2.7472	3.3612	6.1083
250	3.973	0.001251	0.05013	1080.39	1522	2602.4	1085.36	1716.2	2801.5	2.7927	3.2802	6.073
255	4.319	0.001263	0.04598	1104.28	1496.7	2600.9	1109.73	1689.8	2799.5	2.8383	3.1992	6.0375
260	4.688	0.001276	0.04221	1128.39	1470.6	2599	1134.37	1662.5	2796.9	2.8838	3.1181	6.0019
265	5.081	0.001289	0.03877	1152.74	1443.9	2596.6	1159.28	1634.4	2793.6	2.9294	3.0368	5.9662
270	5.499	0.001302	0.03564	1177.36	1416.3	2593.7	1184.51	1605.2	2789.7	2.9751	2.9551	5.9301
275	5.942	0.001317	0.03279	1202.25	1387.9	2590.2	1210.07	1574.9	2785	3.0208	2.873	5.8938
280	6.412	0.001332	0.03017	1227.46	1358.7	2586.1	1235.99	1543.6	2779.6	3.0668	2.7903	5.8571
285	6.909	0.001348	0.02777	1253	1328.4	2581.4	1262.31	1511	2773.3	3.113	2.707	5.8199
290	7.436	0.001366	0.02557	1278.92	1297.1	2576	1289.07	1477.1	2776.2	3.1594	2.6227	5.7821

Tabelle A1.1 Sättigungszustand (Temperaturtafel) (Fortsetzung)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
t	p	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
°C	MPa	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
295	7.993	0.001384	0.02354	1305.2	1264.7	2569.9	1316.3	1441.8	2758.1	3.2062	2.5375	5.7437
300	8.581	0.001404	0.02167	1332	1231	2563	1344	1404.9	2749	3.2534	2.4511	5.7045
305	9.202	0.001425	0.019948	1359.3	1195.9	2555.2	1372.4	1366.4	2738.7	3.301	2.3633	5.6643
310	9.856	0.001447	0.01835	1387.1	1159.4	2546.4	1401.3	1326	2727.3	3.3493	2.2737	5.623
315	10.547	0.001472	0.016867	1415.5	1121.1	2536.6	1431	1283.5	2714.5	3.3982	2.1821	5.5804
320	11.274	0.001499	0.015488	1444.6	1080.9	2525.5	1461.5	1238.6	2700.1	3.448	2.0882	5.5362
330	12.845	0.001561	0.012996	1505.3	993.7	2498.9	1525.3	1140.6	2665.9	3.5507	1.8909	5.4417
340	14.586	0.001638	0.010797	1570.3	894.3	2464.6	1594.2	1027.9	2622	3.6594	1.6763	5.3357
350	16.513	0.00174	0.008813	1641.9	776.6	2418.4	1670.6	893.4	2563.9	3.7777	1.4335	5.2112
360	18.651	0.001893	0.006945	1725.2	626.3	2351.5	1760.5	720.5	2481	3.9147	1.1379	5.0526
370	21.03	0.002213	0.004925	1844	384.5	2228.5	1890.5	441.6	2332.1	4.1106	0.6865	4.7971
374.14	22.09	0.003155	0.003155	2029.6	0	2029.6	2099.3	0	2099.3	4.4298	0	4.4298

Tabelle A1.2 Sättigungszustand (Drucktafel)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
p	t	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
kPa	°C	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
0.6113	0.01	0.001	206.14	0	2375.3	2375.3	0.01	2501.3	2501.4	0	9.1562	9.1562
1	6.98	0.001	129.21	29.3	2355.7	2385	29.3	2484.9	2514.2	0.1059	8.8697	8.9756
1.5	13.03	0.001001	87.98	54.71	2338.6	2393.3	54.71	2470.6	2525.3	0.1957	8.6322	8.8279
2	17.5	0.001001	67	73.48	2326	2399.5	73.48	2460	2533.5	0.2607	8.4629	8.7237
2.5	21.08	0.001002	54.25	88.48	2315.9	2404.4	88.49	2451.6	2540	0.312	8.3311	8.6432
3	24.08	0.001003	45.67	101.04	2307.5	2408.5	101.05	2444.5	2545.5	0.3545	8.2231	8.5776
4	28.96	0.001004	34.8	121.45	2293.7	2415.2	121.46	2432.9	2554.4	0.4226	8.052	8.4746
5	32.88	0.001005	28.19	137.81	2282.7	2420.5	137.82	2423.7	2561.5	0.4764	7.9187	8.3951
7.5	40.29	0.001008	19.24	168.78	2261.7	2430.5	168.79	2406	2574.8	0.5764	7.675	8.2515
10	45.81	0.00101	14.67	191.82	2246.1	2437.9	191.83	2392.8	2584.7	0.6493	7.5009	8.1502
15	53.97	0.001014	10.02	225.92	2222.8	2448.7	225.94	2373.1	2599.1	0.7549	7.2536	8.0085
20	60.06	0.001017	7.649	251.38	2205.4	2456.7	251.4	2358.3	2609.7	0.832	7.0766	7.9085
25	64.97	0.00102	6.204	271.9	2191.2	2463.1	271.93	2346.3	2618.2	0.8931	6.9383	7.8314
30	69.1	0.001022	5.229	289.2	2179.2	2468.4	289.23	2336.1	2625.3	0.9439	6.8247	7.7686
40	75.87	0.001027	3.993	317.53	2159.5	2477	317.58	2319.2	2636.8	1.0259	6.6441	7.67

Tabelle A1.2 Sättigungszustand (Drucktafel) (Fortsetzung)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
p	t	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
MPa	°C	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
0.05	81.33	0.00103	3.24	340.44	2143.4	2483.9	340.49	2305.4	2645.9	1.091	6.5029	7.5939
0.075	91.78	0.001037	2.217	384.31	2112.4	2496.7	384.39	2278.6	2663	1.213	6.2434	7.4564
0.1	99.63	0.001043	1.694	417.36	2088.7	2506.1	417.46	2258	2675.5	1.3026	6.0568	7.3594
0.125	105.99	0.001048	1.3749	444.19	2069.3	2513.5	444.32	2241	2685.4	1.374	5.9104	7.2844
0.15	111.37	0.001053	1.1593	466.94	2052.7	2519.7	467.11	2226.5	2693.6	1.4336	5.7897	7.2233
0.175	116.06	0.001057	1.0036	486.8	2038.1	2524.9	486.99	2213.6	2700.6	1.4849	5.6868	7.1717
0.2	120.23	0.001061	0.8857	504.49	2025	2529.5	504.7	2201.9	2706.7	1.5301	5.597	7.1271
0.225	124	0.001064	0.7933	520.47	2013.1	2533.6	520.72	2191.3	2712.1	1.5706	5.5173	7.0878
0.25	127.44	0.001067	0.7187	535.1	2002.1	2537.2	535.37	2181.5	2716.9	1.6072	5.4455	7.0527
0.275	130.6	0.00107	0.6573	548.59	1991.9	2540.5	548.89	2172.4	2721.3	1.6408	5.3801	7.0209
300	133.55	0.001073	0.6058	561.15	1982.4	2543.6	561.47	2163.8	2725.3	1.6718	5.3201	6.9919
0.325	136.3	0.001076	0.562	572.9	1973.5	2546.4	573.25	2155.8	2729	1.7006	5.2646	6.9652
0.35	138.88	0.001079	0.5243	583.95	1965	2548.9	584.33	2148.1	2732.4	1.7275	5.213	6.9405
0.375	141.32	0.001081	0.4914	594.4	1956.9	2551.3	594.81	2140.8	2735.6	1.7528	5.1647	6.9175
0.4	143.63	0.001084	0.4625	604.31	1949.3	2553.6	604.74	2133.8	2738.6	1.7766	5.1193	6.8959
0.45	147.93	0.001088	0.414	622.77	1934.9	2557.6	623.25	2120.7	2743.9	1.8207	5.0359	6.8565
0.5	151.86	0.001093	0.3749	639.68	1921.6	2561.2	640.23	2108.5	2748.7	1.8607	4.9606	6.8213
0.55	155.48	0.001097	0.3427	655.32	1909.2	2564.5	655.93	2097	2753	1.8973	4.892	6.7893
0.6	158.85	0.001101	0.3157	669.9	1897.5	2567.4	670.56	2086.3	2756.8	1.9312	4.8288	6.76
0.65	162.01	0.001104	0.2927	683.56	1886.5	2570.1	684.28	2076	2760.3	1.9627	4.7703	6.7331
0.7	164.97	0.001108	0.2729	696.44	1876.1	2572.5	697.22	2066.3	2763.5	1.9922	4.7158	6.708
0.75	167.78	0.001112	0.2556	708.64	1866.1	2574.7	709.47	2057	2766.4	2.02	4.6647	6.6847
0.8	170.43	0.001115	0.2404	720.22	1856.6	2576.8	721.11	2048	2769.1	2.0462	4.6166	6.6628
0.85	172.96	0.001118	0.227	731.27	1847.4	2578.7	732.22	2039.4	2771.6	2.071	4.5711	6.6421
0.9	175.38	0.001121	0.215	741.83	1838.6	2580.5	742.83	2031.1	2773.9	2.0946	4.528	6.6226
0.95	177.69	0.001124	0.2042	751.95	1830.2	2582.1	753.02	2023.1	2776.1	2.1172	4.4869	6.6041
1	179.91	0.001127	0.19444	761.68	1822	2583.6	762.81	2015.3	2778.1	2.1387	4.4478	6.5865
1.1	184.09	0.001133	0.17753	780.09	1806.3	2586.4	781.34	2000.4	2781.7	2.1792	4.3744	6.5536
1.2	187.99	0.001139	0.16333	797.29	1791.5	2588.8	798.65	1986.2	2784.8	2.2166	4.3067	6.5233
1.3	191.64	0.001144	0.15125	813.44	1777.5	2591	814.93	1972.7	2787.6	2.2515	4.2438	6.4953
1.4	195.07	0.001149	0.14084	828.7	1764.1	2592.8	830.3	1959.7	2790	2.2842	4.185	6.4693
1.5	198.32	0.001154	0.13177	843.16	1751.3	2594.5	844.89	1947.3	2792.2	2.315	4.1298	6.4448
1.75	205.76	0.001166	0.11349	876.46	1721.4	2597.8	878.5	1917.9	2796.4	2.3851	4.0044	6.3896
2	212.42	0.001177	0.09963	906.44	1693.8	2600.3	908.79	1890.7	2799.5	2.4474	3.8935	6.3409

Tabelle A1.2 Sättigungszustand (Drucktafel) (Fortsetzung)

		spez. Volumen		innere Energie			Enthalpie			Entropie		
p	t	v'	v''	u'	Δu_v	u''	h'	Δh_v	h''	s'	Δs_v	s''
MPa	°C	m ³ /kg	m ³ /kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg K	kJ/kg K	kJ/kg K
2.25	218.45	0.001187	0.08875	933.83	1668.2	2602	936.49	1865.2	2801.7	2.5035	3.7937	6.2972
2.5	223.99	0.001197	0.07998	959.11	1644	2603.1	962.11	1841	2803.1	2.5547	3.7028	6.2575
3	233.9	0.001217	0.06668	1004.78	1599.3	2604.1	1008.42	1795.7	2804.2	2.6457	3.5412	6.1869
3.5	242.6	0.001235	0.05707	1045.43	1558.3	2603.7	1049.75	1753.7	2803.4	2.7253	3.4	6.1253
4	250.4	0.001252	0.04978	1082.31	1520	2602.3	1087.31	1714.1	2801.4	2.7964	3.2737	6.0701
5	263.99	0.001286	0.03944	1147.81	1449.3	2597.1	1154.23	1640.1	2794.3	2.9202	3.0532	5.9734
6	275.64	0.001319	0.03244	1205.44	1384.3	2589.7	1213.35	1571	2784.3	3.0267	2.8625	5.8892
7	285.88	0.001351	0.02737	1257.55	1323	2580.5	1267	1505.1	2772.1	3.1211	2.6922	5.8133
8	295.06	0.001384	0.02352	1305.57	1264.2	2569.8	1316.64	1441.3	2758	3.2068	2.5364	5.7432
9	303.4	0.001418	0.02048	1350.51	1207.3	2557.8	1363.26	1378.9	2742.1	3.2858	2.3915	5.6772
10	311.06	0.001452	0.018026	1393.04	1151.4	2544.4	1407.56	1317.1	2724.7	3.3596	2.2544	5.6141
11	318.15	0.001489	0.015987	1433.7	1096	2529.8	1450.1	1255.5	2705.6	3.4295	2.1233	5.5527
12	324.75	0.001527	0.014263	1473	1040.7	2513.7	1491.3	1193.6	2684.9	3.4962	1.9962	5.4924
13	330.93	0.001567	0.01278	1511.1	985	2496.1	1531.5	1130.7	2662.2	3.5606	1.8718	5.4323
14	336.75	0.001611	0.011485	1548.6	928.2	2476.8	1571.1	1066.5	2637.6	3.6232	1.7485	5.3717
15	342.24	0.001658	0.010337	1585.6	869.8	2455.5	1610.5	1000	2610.5	3.6848	1.6249	5.3098
16	347.44	0.001711	0.009306	1622.7	809	2431.7	1650.1	930.6	2580.6	3.7461	1.4994	5.2455
17	352.37	0.00177	0.008364	1660.2	744.8	2405	1690.3	856.9	2547.2	3.8079	1.3698	5.1777
18	357.06	0.00184	0.007489	1698.9	675.4	2374.3	1732	777.1	2509.1	3.8715	1.2329	5.1044
19	361.54	0.001924	0.006657	1739.9	598.1	2338.1	1776.5	688	2464.5	3.9388	1.0839	5.0228
20	365.81	0.002036	0.005834	1785.6	507.5	2293	1826.3	583.4	2409.7	4.0139	0.913	4.9269
21	369.89	0.002207	0.004952	1842.1	388.5	2230.6	1888.4	446.2	2334.6	4.1075	0.6938	4.8013
22	373.8	0.002742	0.003568	1961.9	125.2	2087.1	2022.2	143.4	2165.6	4.311	0.2216	4.5327
22.09	374.14	0.003155	0.003155	2029.6	0	2029.6	2099.3	0	2099.3	4.4298	0	4.4298

Tabelle A1.3 Überhitzter Dampf

	p = 0,01 MPa, tS = 45,81 °C				p = 0,05 MPa, tS = 81,33 °C				p = 0,1 MPa, tS = 99,63 °C			
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	14.674	2437.9	2584.7	8.1502	3.24	2483.9	2645.9	7.5939	1.694	2506.1	2675.5	7.3594
°C	v	u	h	s	v	u	h	s	v	u	h	s
	m³/kg	kJ/kg	kJ/kg	kJ/kgK	m³/kg	kJ/kg	kJ/kg	kJ/kgK	m³/kg	kJ/kg	kJ/kg	kJ/kgK
50	14.869	2443.9	2592.6	8.1749	-	-	-	-	-	-	-	-
100	17.196	2515.5	2687.5	8.4479	3.418	2511.6	2682.5	7.6947	1.6958	2506.7	2676.2	7.3614
150	19.512	2587.9	2783	8.6882	3.889	2585.6	2780.1	7.9401	1.9364	2582.8	2776.4	7.6134
200	21.825	2661.3	2879.5	8.9038	4.356	2659.9	2877.7	8.158	2.172	2658.1	2875.3	7.8343
250	24.136	2736	2977.3	9.1002	4.82	2735	2976	8.3556	2.406	2733.7	2974.3	8.0333
300	26.445	2812.1	3076.5	9.2813	5.284	2811.3	3075.5	8.5373	2.639	2810.4	3074.3	8.2158
400	31.063	2968.9	3279.6	9.6077	6.209	2968.5	3278.9	8.8642	3.103	2967.9	3278.2	8.5435
500	35.679	3132.3	3489.1	9.8978	7.134	3132	3488.7	9.1546	3.565	3131.6	3488.1	8.8342
600	40.295	3302.5	3705.4	10.1608	8.057	3302.2	3705.1	9.4178	4.028	3301.9	3704.7	9.0976
700	44.911	3479.6	3928.7	10.4028	8.981	3479.4	3928.5	9.6599	4.49	3479.2	3928.2	9.3398
800	49.526	3663.8	4159	10.6281	9.904	3663.6	4158.9	9.8852	4.952	3663.5	4158.6	9.5652
900	54.141	3855	4396.4	10.8396	10.828	3854.9	4396.3	10.0967	5.414	3854.8	4396.1	9.7767
1000	58.757	4053	4640.6	11.0393	11.751	4052.9	4640.5	10.2964	5.875	4052.8	4640.3	9.9764
	p = 0,2 MPa, tS = 120,23 °C				p = 0,3 MPa, tS = 133,55 °C				p = 0,4 MPa, tS = 143,63 °C			
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	0.8857	2529.5	2706.7	7.1272	0.6058	2543.6	2725.3	6.9919	0.4625	2553.6	2738.6	6.8959
°C	v	u	h	s	v	u	h	s	v	u	h	s
	m³/kg	kJ/kg	kJ/kg	kJ/kgK	m³/kg	kJ/kg	kJ/kg	kJ/kgK	m³/kg	kJ/kg	kJ/kg	kJ/kgK
150	0.9596	2576.9	2768.8	7.2795	0.6339	2570.8	2761	7.0778	0.4708	2564.5	2752.8	6.9299
200	1.0803	2654.4	2870.5	7.5066	0.7163	2650.7	2865.6	7.3115	0.5342	2646.8	2860.5	7.1706
250	1.1988	2731.2	2971	7.7086	0.7964	2728.7	2967.6	7.5166	0.5951	2726.1	2964.2	7.3789
300	1.3162	2808.6	3071.8	7.8926	0.8753	2806.7	3069.3	7.7022	0.6548	2804.8	3066.8	7.5662
400	1.5493	2966.7	3276.6	8.2218	1.0315	2965.6	3275	8.033	0.7726	2964.4	3273.4	7.8985
500	1.7814	3130.8	3487.1	8.5133	1.1867	3130	3486	8.3251	0.8893	3129.2	3484.9	8.1913
600	2.013	3301.4	3704	8.777	1.3414	3300.8	3703.2	8.5892	1.0055	3300.2	3702.4	8.4558
700	2.244	3478.8	3927.6	9.0194	1.4957	3478.4	3927.1	8.8319	1.1215	3477.9	3926.5	8.6987
800	2.475	3663.1	4158.2	9.2449	1.6499	3662.9	4157.8	9.0576	1.2372	3662.4	4157.3	8.9244
900	2.706	3854.5	4395.8	9.4566	1.8041	3854.2	4395.4	9.2692	1.3529	3853.9	4395.1	9.1362
1000	2.937	4052.5	4640	9.6563	1.9581	4052.3	4639.7	9.469	1.4685	4052	4639.4	9.336

Tabelle A1.3 Überhitzter Dampf (Fortsetzung)

p = 0,5 MPa, tS = 151,86 °C				p = 0,6 MPa, tS = 158,85 °C				p = 0,8 MPa, tS = 170,43 °C				
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
200	0.4249	2642.9	2855.4	7.0592	0.352	2638.9	2850.1	6.9665	0.2608	2630.6	2839.3	6.8158
250	0.4744	2723.5	2960.7	7.2709	0.3938	2720.9	2957.2	7.1816	0.2931	2715.5	2950	7.0384
300	0.5226	2802.9	3064.2	7.4599	0.4344	2801	3061.6	7.3724	0.3241	2797.2	3056.5	7.2328
350	0.5701	2882.6	3167.7	7.6329	0.4742	2881.2	3165.7	7.5464	0.3544	2878.2	3161.7	7.4089
400	0.6173	2963.2	3271.9	7.7938	0.5137	2962.1	3270.3	7.7079	0.3834	2959.7	3267.1	7.5716
500	0.7109	3128.4	3483.9	8.0873	0.592	3127.6	3482.8	8.0021	0.4433	3126	3480.6	7.8673
600	0.8041	3299.6	3701.7	8.3522	0.6697	3299.1	3700.9	8.2674	0.5018	3297.9	3699.4	8.1333
700	0.8969	3477.5	3925.9	8.5952	0.7472	3477	3925.3	8.5107	0.5601	3476.2	3924.2	8.377
800	0.9896	3662.1	4156.9	8.8211	0.8245	3661.8	4156.5	8.7367	0.6181	3661.1	4155.6	8.6033
900	1.0822	3853.6	4394.7	9.0329	0.9017	3853.4	4394.4	8.9486	0.6761	3852.8	4393.7	8.8153
1000	1.1747	4051.8	4639.1	9.2328	0.9788	4051.5	4638.8	9.1485	0.734	4051	4638.2	9.0153
p = 1,0 MPa, tS = 179,91 °C				p = 1,2 MPa, tS = 187,99 °C				p = 1,4 MPa, tS = 195,07 °C				
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
200	0.206	2621.9	2827.9	6.694	0.1693	2612.8	2815.9	6.5898	0.14302	2603.1	2803.3	6.4975
250	0.2327	2709.9	2942.6	6.9247	0.19234	2704.2	2935	6.8294	0.1635	2698.3	2927.2	6.7467
300	0.2579	2793.2	3051.2	7.1229	0.2138	2789.2	3045.8	7.0317	0.18228	2785.2	3040.4	6.9534
350	0.2825	2875.2	3157.7	7.3011	0.2345	2872.2	3153.6	7.2121	0.2003	2869.2	3149.5	7.136
400	0.3066	2957.3	3263.9	7.4651	0.2548	2954.9	3260.7	7.3774	0.2178	2952.5	3257.5	7.3026
500	0.3541	3124.4	3478.5	7.7622	0.2946	3122.8	3476.3	7.6759	0.2521	3121.1	3474.1	7.6027
600	0.4011	3296.8	3697.9	8.029	0.3339	3295.6	3696.3	7.9435	0.286	3294.4	3694.8	7.871
700	0.4478	3475.3	3923.1	8.2731	0.3729	3474.4	3922	8.1881	0.3195	3473.6	3920.8	8.116
800	0.4943	3660.4	4154.7	8.4996	0.4118	3659.7	4153.8	8.4148	0.3528	3659	4153	8.3431
900	0.5407	3852.2	4392.9	8.7118	0.4505	3851.6	4392.2	8.6272	0.3861	3851.1	4391.5	8.5556
1000	0.5871	4050.5	4637.6	8.9119	0.4892	4050	4637	8.8274	0.4192	4049.5	4636.4	8.7559

Tabelle A1.3 Überhitzter Dampf (Fortsetzung)

p = 4,0 MPa, tS = 250,40 °C				p = 4,5 MPa, tS = 257,49 °C				p = 5,0 MPa, tS = 263,99 °C				
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
0.04978	2602.3	2801.4	6.0701	0.04406	2600.1	2798.3	6.0198	0.03944	2597.1	2794.3	5.9734	
t		u	h	s		u	h	s		u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
275	0.05457	2667.9	2886.2	6.2285	0.0473	2650.3	2863.2	6.1401	0.04141	2631.3	2838.3	6.0544
300	0.05884	2725.3	2960.7	6.3615	0.05135	2712	2943.1	6.2828	0.04532	2698	2924.5	6.2084
350	0.06645	2826.7	3092.5	6.5821	0.0584	2817.8	3080.6	6.5131	0.05194	2808.7	3068.4	6.4493
400	0.07341	2919.9	3213.6	6.769	0.06475	2913.3	3204.7	6.7047	0.05781	2906.6	3195.7	6.6459
450	0.08002	3010.2	3330.3	6.9363	0.07074	3005	3323.3	6.8746	0.0633	2999.7	3316.2	6.8186
500	0.08643	3099.5	3445.3	7.0901	0.07651	3095.3	3439.6	7.0301	0.06857	3091	3433.8	6.9759
600	0.09885	3279.1	3674.4	7.3688	0.08765	3276	3670.5	7.311	0.07869	3273	3666.5	7.2589
700	0.11095	3462.1	3905.9	7.6198	0.09847	3459.9	3903	7.5631	0.08849	3457.6	3900.1	7.5122
800	0.12287	3650	4141.5	7.8502	0.10911	3648.3	4139.3	7.7942	0.09811	3646.6	4137.1	7.744
900	0.13469	3843.6	4382.3	8.0647	0.11965	3842.2	4380.6	8.0091	0.10762	3840.7	4378.8	7.9593
1000	0.14645	4042.9	4628.7	8.2662	0.13013	4041.6	4627.2	8.2108	0.11707	4040.4	4625.7	8.1612
p = 6,0 MPa, tS = 275,64 °C				p = 7,0 MPa, tS = 285,88 °C				p = 8,0 MPa, tS = 295,06 °C				
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
	0.03244	2589.7	2784.3	5.8892	0.02737	2580.5	2772.1	5.8133	0.02352	2569.1	2758	5.7432
t	v	u	h	s	v''	u	h	s	v''	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
300	0.03616	2667.2	2884.2	6.0674	0.02947	2632.2	2838.4	5.9305	0.02426	2590.9	2785	5.7906
350	0.04223	2789.6	3043	6.3335	0.03524	2769.4	3016	6.2283	0.02995	2747.7	2987.3	6.1301
400	0.04739	2892.9	3177.2	6.5408	0.03993	2878.6	3158.1	6.4478	0.03432	2863.8	3138.3	6.3634
450	0.05214	2988.9	3301.8	6.7193	0.04416	2978	3287.1	6.6327	0.03817	2966.7	3272	6.5551
500	0.05665	3082.2	3422.2	6.8803	0.04814	3073.4	3410.3	6.7975	0.04175	3064.3	3398.3	6.724
550	0.06101	3174.6	3540.6	7.0288	0.05195	3167.2	3530.9	6.9486	0.04516	3159.8	3521	6.8778
600	0.06525	3266.9	3658.4	7.1677	0.05565	3260.7	3650.3	7.0894	0.04845	3254.4	3642	7.0206
700	0.07352	3453.1	3894.2	7.4234	0.06283	3448.5	3888.3	7.3476	0.05481	3443.9	3882.4	7.2812
800	0.0816	3643.1	4132.7	7.6566	0.06981	3639.5	4128.2	7.5822	0.06097	3636	4123.8	7.5173
900	0.08958	3837.8	4375.3	7.8727	0.07669	3835	4371.8	7.7991	0.06702	3832.1	4368.3	7.7351
1000	0.09749	4037.8	4622.7	8.0751	0.0835	4035.3	4619.8	8.002	0.07301	4032.8	4616.9	7.9384

Tabelle A1.3 Überhitzter Dampf (Fortsetzung)

	p = 9,0 MPa, tS = 303,40 °C				p = 10,0 MPa, tS = 311,06 °C				p = 12,5 MPa, tS = 327,89 °C			
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
325	0.02327	2646.6	2856	5.8712	0.019861	2610.4	2809.1	5.7568	-	-	-	-
350	0.0258	2724.4	2956.6	6.0361	0.02242	2699.2	2923.4	5.9443	0.016126	2624.6	2826.2	5.7118
400	0.02993	2848.4	3117.8	6.2854	0.02641	2832.4	3096.5	6.212	0.02	2789.3	3039.3	6.0417
450	0.0335	2955.2	3256.6	6.4844	0.02975	2943.4	3240.9	6.419	0.02299	2912.5	3199.8	6.2719
500	0.03677	3055.2	3386.1	6.6576	0.03279	3045.8	3373.7	6.5966	0.0256	3021.7	3341.8	6.4618
550	0.03987	3152.2	3511	6.8142	0.03564	3144.6	3500.9	6.7561	0.02801	3125	3475.2	6.629
600	0.04285	3248.1	3633.7	6.9589	0.03837	3241.7	3625.3	6.9029	0.03029	3225.4	3604	6.781
650	0.04574	3343.6	3755.3	7.0943	0.04101	3338.2	3748.2	7.0398	0.03248	3324.4	3730.4	6.9218
700	0.04857	3439.3	3876.5	7.2221	0.04358	3434.7	3870.5	7.1687	0.0346	3422.9	3855.3	7.0536
800	0.05409	3632.5	4119.3	7.4596	0.04859	3628.9	4114.8	7.4077	0.03869	3620	4103.6	7.2965
900	0.0595	3829.2	4364.8	7.6783	0.05349	3826.3	4361.2	7.6272	0.04267	3819.1	4352.5	7.5182
1000	0.06485	4030.3	4614	7.8821	0.05832	4027.8	4611	7.8315	0.04658	4021.6	4603.8	7.7237
	p = 15,0 MPa, tS = 342,24 °C				p = 17,5 MPa, tS = 354,75 °C				p = 20,0 MPa, tS = 365,81 °C			
	v''	u''	h''	s''	v''	u''	h''	s''	v''	u''	h''	s''
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
350	0.01147	2520.4	2692.4	5.4421	-	-	-	-	-	-	-	-
400	0.015649	2740.7	2975.5	5.8811	0.012447	2685	2902.9	5.7213	0.009942	2619.3	2818.1	5.554
450	0.018445	2879.5	3156.2	6.1404	0.015174	2844.2	3109.7	6.0184	0.012695	2806.2	3060.1	5.9017
500	0.0208	2996.6	3308.6	6.3443	0.017358	2970.3	3274.1	6.2383	0.014768	2942.9	3238.2	6.1401
550	0.02293	3104.7	3448.6	6.5199	0.019288	3083.9	3421.4	6.423	0.016555	3062.4	3393.5	6.3348
600	0.02491	3208.6	3582.3	6.6776	0.02106	3191.5	3560.1	6.5866	0.018178	3174	3537.6	6.5048
650	0.0268	3310.3	3712.3	6.8224	0.02274	3296	3693.9	6.7357	0.019693	3281.4	3675.3	6.6582
700	0.02861	3410.9	3840.1	6.9572	0.02434	3398.7	3824.6	6.8736	0.02113	3386.4	3809	6.7993
800	0.0321	3610.9	4092.4	7.204	0.02738	3601.8	4081.1	7.1244	0.02385	3592.7	4069.7	7.0544
900	0.03546	3811.9	4343.8	7.4279	0.03031	3804.7	4335.1	7.3507	0.02645	3797.5	4326.4	7.283
1000	0.03875	4015.4	4596.6	7.6348	0.03316	4009.3	4589.5	7.5589	0.02897	4003.1	4582.5	7.4925

Tabelle A1.3 Überhitzter Dampf (Fortsetzung)

		p = 25,0 MPa				p = 30,0 MPa				p = 35,0 MPa			
t	v	u	h	s	v	u	h	s	v	u	h	s	
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	
375	0.0019731	1798.7	1848	4.032	0.0017892	1737.8	1791.5	3.9305	0.0017003	1702.9	1762.4	3.8722	
400	0.006004	2430.1	2580.2	5.1418	0.00279	2067.4	2151.1	4.4728	0.0021	1914.1	1987.6	4.2126	
425	0.007881	2609.2	2806.3	5.4723	0.005303	2455.1	2614.2	5.1504	0.003428	2253.4	2373.4	4.7747	
450	0.009162	2720.7	2949.7	5.6744	0.006735	2619.3	2821.4	5.4424	0.004961	2498.7	2672.4	5.1962	
500	0.011123	2884.3	3162.4	5.9592	0.008678	2820.7	3081.1	5.7905	0.006927	2751.9	2994.4	5.6282	
550	0.012724	3017.5	3335.6	6.1765	0.010168	2970.3	3275.4	6.0342	0.008345	2921	3213	5.9026	
600	0.014137	3137.9	3491.4	6.3602	0.011446	3100.5	3443.9	6.2331	0.009527	3062	3395.3	6.1179	
650	0.015433	3251.6	3637.4	6.5229	0.012596	3221	3598.9	6.4058	0.010575	3189.8	3559.9	6.301	
700	0.016646	3361.3	3777.5	6.6707	0.013661	3335.8	3745.6	6.5606	0.011533	3309.8	3713.5	6.4631	
800	0.018912	3574.3	4047.1	6.9345	0.015623	3555.5	4024.2	6.8332	0.013278	3536.7	4001.5	6.745	
900	0.021045	3783	4309.1	7.168	0.017448	3768.5	4291.9	7.0718	0.014883	3754	4274.9	6.9886	
1000	0.0231	3990	4568.5	7.3802	0.019196	3978.8	4554.7	7.2867	0.01641	3966.7	4541.1	7.2064	
		p = 40,0 MPa				p = 50,0 MPa				p = 60,0 MPa			
t	v	u	h	s	v	u	h	s	v	u	h	s	
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	
375	0.0016407	1677.1	1742.8	3.829	0.0015594	1638.6	1716.6	3.7639	0.0015028	1609.4	1699.5	3.7141	
400	0.0019077	1854.6	1930.9	4.1135	0.0017309	1788.1	1874.6	4.0031	0.0016335	1745.4	1843.4	3.9318	
425	0.002532	2096.9	2198.1	4.5029	0.002007	1959.7	2060	4.2734	0.0018165	1892.7	2001.7	4.1626	
450	0.003693	2365.1	2512.8	4.9459	0.002486	2159.6	2284	4.5884	0.002085	2053.9	2179	4.4121	
500	0.005622	2678.4	2903.3	5.47	0.003892	2525.5	2720.1	5.1726	0.002956	2390.6	2567.9	4.9321	
550	0.006984	2869.7	3149.1	5.7785	0.005118	2763.6	3019.5	5.5485	0.003956	2658.8	2896.2	5.3441	
600	0.008094	3022.6	3346.4	6.0114	0.006112	2942	3247.6	5.8178	0.004834	2861.1	3151.2	5.6452	
650	0.009063	3158	3520.6	6.2054	0.006966	3093.5	3441.8	6.0342	0.005595	3028.8	3364.5	5.8829	
700	0.009941	3283.6	3681.2	6.375	0.007727	3230.5	3616.8	6.2189	0.006272	3177.2	3553.5	6.0824	
800	0.011523	3517.8	3978.7	6.6662	0.009076	3479.8	3933.6	6.529	0.007459	3441.5	3889.1	6.4109	
900	0.012962	3739.4	4257.9	6.915	0.010283	3710.3	4224.4	6.7882	0.008508	3681	4191.5	6.6805	
1000	0.014324	3954.6	4527.6	7.1356	0.011411	3930.5	4501.1	7.0146	0.00948	3906.4	4475.2	6.9127	

Tabelle A1.4 Unterkühlte Flüssigkeit

	p = 5,0 MPa, tS = 263,99 °C				p = 10,0 MPa, tS = 311,06 °C				p = 15,0 MPa, tS = 342,24 °C			
	v'	u'	h'	s'	v'	u'	h'	s'	v'	u'	h'	s'
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
0	0.0009977	0.04	5.04	0.0001	0.0009952	0.09	10.04	0.0002	0.0009928	0.15	0.15	0.0004
20	0.0009995	83.65	88.65	0.2956	0.0009972	83.36	93.33	0.2945	0.000995	83.06	97.99	0.2934
40	0.0010056	166.95	171.97	0.5705	0.0010034	166.35	176.38	0.5686	0.0010013	165.76	180.78	0.5666
60	0.0010149	250.23	255.3	0.8285	0.0010127	249.36	259.49	0.8258	0.0010105	248.51	263.67	0.8232
80	0.0010268	333.72	338.85	1.072	0.0010245	332.59	342.83	1.0688	0.0010222	331.48	346.81	1.0656
100	0.001041	417.52	422.72	1.303	0.0010385	416.12	426.5	1.2992	0.0010361	414.74	430.28	1.2955
120	0.0010576	501.8	507.09	1.5233	0.0010549	500.08	510.64	1.5189	0.0010522	498.4	514.19	1.5145
140	0.0010768	586.76	592.15	1.7343	0.0010737	584.68	595.42	1.7292	0.0010707	582.66	598.72	1.7242
160	0.0010988	672.62	678.12	1.9375	0.0010953	670.13	681.08	1.9317	0.0010918	667.71	684.09	1.926
180	0.001124	759.63	765.25	2.1341	0.0011199	756.65	767.84	2.1275	0.0011159	753.76	770.5	2.121
200	0.001153	848.1	853.9	2.3255	0.001148	844.5	856	2.3178	0.0011433	841	858.2	2.3104
220	0.0011866	938.4	944.4	2.5128	0.0011805	934.1	945.9	2.5039	0.0011748	929.9	947.5	2.4953
240	0.0012264	1031.4	1037.5	2.6979	0.0012187	1026	1038.1	2.6872	0.0012114	1020.8	1039	2.6771
260	0.0012749	1127.9	1134.3	2.883	0.0012645	1121.1	1133.7	2.8699	0.001255	1114.6	1133.4	2.8576
280					0.0013216	1220.9	1234.1	3.0548	0.0013084	1212.5	1232.1	3.0393
300					0.0013972	1328.4	1342.3	3.2469	0.001377	1316.6	1337.3	3.226
320									0.0014724	1431.1	1453.2	3.4247
340									0.0016311	1567.5	1591.9	3.6546

Tabelle A1.4 Unterkühlte Flüssigkeit (Fortsetzung)

	p = 20,0 MPa, tS = 365,81 °C				p = 30,0 MPa				p = 50,0 MPa			
	v'	u'	h'	s'								
t	v	u	h	s	v	u	h	s	v	u	h	s
°C	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK	m ³ /kg	kJ/kg	kJ/kg	kJ/kgK
0	0.0009904	0.19	20.01	0.0004	0.0009856	0.25	29.82	0.0001	0.0009766	0.2	49.03	-0.0014
20	0.0009928	82.77	102.62	0.2923	0.0009886	82.17	111.84	0.2899	0.0009804	81	130.02	0.2848
40	0.0009992	165.17	185.16	0.5646	0.0009951	164.04	193.89	0.5607	0.0009872	161.86	211.21	0.5527
60	0.0010084	247.68	267.85	0.8206	0.0010042	246.06	276.19	0.8154	0.0009962	242.98	292.79	0.8052
80	0.0010199	330.4	350.8	1.0624	0.0010156	328.3	358.77	1.0561	0.0010073	324.34	374.7	1.044
100	0.0010337	413.39	434.06	1.2917	0.001029	410.78	441.66	1.2844	0.0010201	405.88	456.89	1.2703
120	0.0010496	496.76	517.76	1.5102	0.0010445	493.59	524.93	1.5018	0.0010348	487.65	539.39	1.4857
140	0.0010678	580.69	602.04	1.7193	0.0010621	576.88	608.75	1.7098	0.0010515	569.77	622.35	1.6915
160	0.0010885	665.35	687.12	1.9204	0.0010821	660.82	693.28	1.9096	0.0010703	652.41	705.92	1.8891
180	0.001112	750.95	773.2	2.1147	0.0011047	745.59	778.73	2.1024	0.0010912	735.69	790.25	2.0794
200	0.0011388	837.7	860.5	2.3031	0.0011302	831.4	865.3	2.2893	0.0011146	819.7	875.5	2.2634
220	0.0011693	925.9	949.3	2.487	0.001159	918.3	953.1	2.4711	0.0011408	904.7	961.7	2.4419
240	0.0012046	1016	1040	2.6674	0.001192	1006.9	1042.6	2.649	0.0011702	990.7	1049.2	2.6158
260	0.0012462	1108.6	1133.5	2.8459	0.0012303	1097.4	1134.3	2.8243	0.0012034	1078.1	1138.2	2.786
280	0.0012965	1204.7	1230.6	3.0248	0.0012755	1190.7	1229	2.9986	0.0012415	1167.2	1229.3	2.9537
300	0.0013596	1306.1	1333.3	3.2071	0.0013304	1287.9	1327.8	3.1741	0.001286	1258.7	1323	3.12
320	0.0014437	1415.7	1444.6	3.3979	0.0013997	1390.7	1432.7	3.3539	0.0013388	1353.3	1420.2	3.2868
340	0.0015684	1539.7	1571	3.6075	0.001492	1501.7	1546.5	3.5426	0.0014032	1452	1522.1	3.4557
360	0.0018226	1702.8	1739.3	3.8772	0.0016265	1626.6	1675.4	3.7494	0.0014838	1556	1630.2	3.6291
380					0.0018691	1781.4	1837.5	4.0012	0.0015884	1667.2	1746.6	3.8101

Tabelle A1.5 Sublimationszustand

		spez. Volumen		innere Energie			Enthalpie			Entropie		
t	p	$v^s \cdot 10^3$	v''	u^s	Δu_s	u''	h^s	Δh_s	h''	s^s	Δs_s	s''
°C	kPa	m^3/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	kJ/kg	$kJ/(kg\ K)$	$kJ/(kg\ K)$	$kJ/(kg\ K)$
0.01	0.6113	1.0908	206.1	-333.4	2708.7	2375.3	-333.4	2834.8	2501.4	-1.221	10.378	9.156
0	0.6108	1.0908	206.3	-333.43	2708.8	2375.3	-333.43	2834.8	2501.3	-1.221	10.378	9.157
-2	0.5176	1.0904	241.7	-337.62	2710.2	2372.6	-337.62	2825.3	2497.7	-1.237	10.456	9.219
-4	0.4375	1.0901	283.8	-341.78	2711.6	2369.8	-341.78	2835.7	2494	-1.253	10.536	9.283
-6	0.3689	1.0898	334.2	-345.91	2712.9	2367	-345.91	2836.2	2490.3	-1.268	10.616	9.348
-8	0.3102	1.0894	394.4	-350.02	2714.2	2364.2	-350.02	2836.6	2486.6	-1.284	10.698	9.414
-10	0.2602	1.0891	466.7	-354.09	2715.5	2361.4	-354.09	2837	2482.9	-1.299	10.781	9.481
-12	0.2176	1.0888	553.7	-358.14	2716.8	2358.7	-358.14	2837.3	2479.2	-1.315	10.865	9.55
-14	0.1815	1.0884	658.8	-362.15	2718	2355.9	-362.15	2837.6	2475.5	-1.331	10.95	9.619
-16	0.151	1.0881	786	-366.14	2719.2	2353.1	-366.14	2837.9	2471.8	-1.346	11.036	9.69
-18	0.1252	1.0878	940.5	-370.1	2720.4	2350.3	-370.1	2838.2	2468.1	-1.362	11.123	9.762
-20	0.1035	1.0874	1128.6	-374.03	2721.6	2347.5	-374.03	2838.4	2464.3	-1.377	11.212	9.835
-22	0.0853	1.0871	1358.4	-377.93	2722.7	2344.7	-377.93	2838.6	2460.6	-1.393	11.302	9.909
-24	0.0701	1.0868	1640.1	-381.8	2723.7	2342	-381.8	2838.7	2456.9	-1.408	11.394	9.985
-26	0.0574	1.0864	1986.4	-385.64	2724.8	2339.2	-385.64	2838.9	2453.2	-1.424	11.486	10.062
-28	0.0469	1.0861	2413.7	-389.45	2725.8	2336.4	-389.45	2839	2449.5	-1.439	11.58	10.141
-30	0.0381	1.0858	2943	-393.23	2726.8	2333.6	-393.23	2839	2445.8	-1.455	11.676	10.221
-32	0.0309	1.0854	3600	-396.98	2727.8	2330.8	-396.98	2839.1	2442.1	-1.471	11.773	10.303
-34	0.025	1.0851	4419	-400.71	2728.7	2328	-400.71	2839.1	2438.4	-1.486	11.872	10.386
-36	0.0201	1.0848	5444	-404.4	2729.6	2325.2	-404.4	2839.1	2434.7	-1.501	11.972	10.47
-38	0.0161	1.0844	6731	-408.06	2730.5	2322.4	-408.06	2839	2430.9	-1.517	12.073	10.556
-40	0.0129	1.0841	8354	-411.7	2731.3	2319.6	-411.7	2838.9	2427.2	-1.532	12.176	10.644