

TABLE A.6 Thermophysical Properties of Saturated Water^a

Temperature, T (K)	Specific Volume (m ³ /kg)		Heat of Vaporization, h_{fg} (kJ/kg)	Specific Heat (kJ/kg·K)		Viscosity (N·s/m ²)		Thermal Conductivity (W/m·K)	Prandtl Number		Surface Tension, $\sigma_f \cdot 10^3$ (N/m)	Expansion Coeff., $\beta_f \cdot 10^6$ (K ⁻¹)	Temperature, T (K)
	Pressure, p (bar) ^b	$v_f \cdot 10^3$		v_g	$c_{p,f}$	$c_{p,g}$	$\mu_f \cdot 10^6$		$\mu_g \cdot 10^6$	$k_f \cdot 10^3$			
273.15	0.00611	1.000	206.3	2502	4.217	1.854	1750	8.02	18.2	12.99	0.815	-68.05	273.15
275	0.00697	1.000	181.7	2497	4.211	1.855	1652	8.09	18.3	12.22	0.817	-32.74	275
280	0.00990	1.000	130.4	2485	4.198	1.858	1422	8.29	18.6	10.26	0.825	46.04	280
285	0.01387	1.000	99.4	2473	4.189	1.861	1225	8.49	18.9	8.81	0.833	114.1	285
290	0.01917	1.001	69.7	2461	4.184	1.864	1080	8.69	19.3	7.56	0.841	174.0	290
295	0.02617	1.002	51.94	2449	4.181	1.868	959	8.89	19.5	6.62	0.849	227.5	295
300	0.03531	1.003	39.13	2438	4.179	1.872	855	9.09	19.6	5.83	0.857	276.1	300
305	0.04712	1.005	29.74	2426	4.178	1.877	769	9.29	20.1	5.20	0.865	320.6	305
310	0.06221	1.007	22.93	2414	4.178	1.882	695	9.49	20.4	4.62	0.873	361.9	310
315	0.08132	1.009	17.82	2402	4.179	1.888	631	9.69	20.7	4.16	0.883	400.4	315
320	0.1053	1.011	13.98	2390	4.180	1.895	577	9.89	21.0	3.77	0.894	436.7	320
325	0.1351	1.013	11.06	2378	4.182	1.903	528	10.09	21.3	3.42	0.901	471.2	325
330	0.1719	1.016	8.82	2366	4.184	1.911	489	10.29	21.7	3.15	0.908	504.0	330
335	0.2167	1.018	7.09	2354	4.186	1.920	453	10.49	22.0	2.88	0.916	535.5	335
340	0.2713	1.021	5.74	2342	4.188	1.930	420	10.69	22.3	2.66	0.925	566.0	340
345	0.3372	1.024	4.683	2329	4.191	1.941	389	10.89	22.6	2.45	0.933	595.4	345
350	0.4163	1.027	3.846	2317	4.195	1.954	365	11.09	23.0	2.29	0.942	624.2	350
355	0.5100	1.030	3.180	2304	4.199	1.968	343	11.29	23.3	2.14	0.951	652.3	355
360	0.6209	1.034	2.645	2291	4.203	1.983	324	11.49	23.7	2.02	0.960	697.9	360
365	0.7514	1.038	2.212	2278	4.209	1.999	306	11.69	24.1	1.91	0.969	707.1	365
370	0.9040	1.041	1.861	2265	4.214	2.017	289	11.89	24.5	1.80	0.978	728.7	370
373.15	1.0133	1.044	1.679	2257	4.217	2.029	279	12.02	24.8	1.76	0.984	750.1	373.15
375	1.0815	1.045	1.574	2252	4.220	2.036	274	12.09	24.9	1.70	0.987	761	375
380	1.2869	1.049	1.337	2239	4.226	2.057	260	12.29	25.4	1.61	0.999	788	380
385	1.5233	1.053	1.142	2225	4.232	2.080	248	12.49	25.8	1.53	1.004	814	385
390	1.794	1.058	0.980	2212	4.239	2.104	237	12.69	26.3	1.47	1.013	841	390
400	2.455	1.067	0.731	2183	4.256	2.158	217	13.05	27.2	1.34	1.033	896	400
410	3.302	1.077	0.553	2153	4.278	2.221	200	13.42	28.2	1.24	1.054	952	410
420	4.370	1.088	0.425	2123	4.302	2.291	185	13.79	29.8	1.16	1.075	1010	420
430	5.699	1.099	0.331	2091	4.331	2.369	173	14.14	30.4	1.09	1.10	1072	430