

C.12 Thermophysical Properties of Saturated Water

Temp K	Pressure $P \times 10^{-5}$ Pa	Specific Heat c_p kJ/kg·K	Viscosity $\text{N} \cdot \text{s}/\text{m}^2$ $\mu \times 10^6$	Thermal Conduc. k W/m·K	Prandtl Number Pr	Expansion Coefficient $\beta \times 10^6$ K^{-1}
273.15	0.00611	4.217	1750	0.569	12.99	-68.05
275	0.00697	4.211	1652	0.574	12.22	-32.74
280	0.00990	4.198	1422	0.582	10.26	46.04
285	0.01387	4.189	1225	0.590	8.81	114.1
290	0.01917	4.184	1080	0.598	7.56	174.0
295	0.02617	4.181	959	0.606	6.62	227.5
300	0.03531	4.179	855	0.613	5.83	276.1
305	0.04712	4.178	769	0.620	5.20	320.6
310	0.06221	4.178	695	0.628	4.62	361.9
315	0.08132	4.179	631	0.634	4.16	400.4
320	0.1053	4.180	577	0.640	3.77	436.7
325	0.1351	4.182	528	0.645	3.42	471.2
330	0.1719	4.184	489	0.650	3.15	504.0
335	0.2167	4.186	453	0.656	2.88	535.5
340	0.2713	4.188	420	0.660	2.66	566.0
345	0.3372	4.191	389	0.668	2.45	595.4
350	0.4163	4.195	365	0.668	2.29	624.2
355	0.5100	4.199	343	0.671	2.14	652.3
360	0.6209	4.203	324	0.674	2.02	697.9
365	0.7514	4.209	306	0.677	1.91	707.1
370	0.9040	4.214	289	0.679	1.80	728.7
373.15	1.0133	4.217	279	0.680	1.76	750.1
375	1.0815	4.220	274	0.681	1.70	761
380	1.2869	4.226	260	0.683	1.61	788

Adapted from Mills, A.F. 1995. *Basic Heat and Mass Transfer*. Irwin, Chicago.