

VALENCIA COLLEGE

Chemistry

Appendix #1: Density of Water

Density of Water in g/mL at Common Temperatures and Pressures.^{1,2}

Temperature (°C)	Pressure, in Hg (mm Hg)						
	27.70 (703.6)	29.70 (754.4)	29.90 (759.5)	30.00 (762.0)	30.10 (764.5)	30.20 (767.1)	32.3 (820.4)
16.5	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989
17.0	0.9988	0.9988	0.9988	0.9988	0.9988	0.9988	0.9988
17.5	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
18.0	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986
18.5	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
19.0	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984
19.5	0.9983	0.9983	0.9983	0.9983	0.9983	0.9983	0.9983
20.0	0.998204	0.998207	0.998207	0.998207	0.998207	0.998208	0.998211
20.5	0.998099	0.998102	0.998103	0.998103	0.998103	0.998103	0.998106
21.0	0.997992	0.997995	0.997995	0.997996	0.997996	0.997996	0.997999
21.5	0.997882	0.997885	0.997886	0.997886	0.997886	0.997886	0.997889
22.0	0.997770	0.997773	0.997773	0.997774	0.997774	0.997774	0.997777
22.5	0.997655	0.997658	0.997659	0.997659	0.997659	0.997659	0.997662
23.0	0.997538	0.997541	0.997541	0.997542	0.997542	0.997542	0.997545
23.5	0.997418	0.997421	0.997422	0.997422	0.997422	0.997422	0.997425
24.0	0.997296	0.997299	0.997299	0.997299	0.997300	0.997300	0.997303
24.5	0.997171	0.997174	0.997175	0.997175	0.997175	0.997175	0.997178
25.0	0.997044	0.997047	0.997048	0.997048	0.997048	0.997048	0.997051

1. Data for temperatures of 20.0 °C and higher were compiled from: Lemmon, E.W.; McLinden, M.O.; Friend, D.G. Thermophysical Properties of Fluid Systems. *NIST Chemistry WebBook, NIST Standard Reference Database Number 69*. Eds. P.J. Linstrom and W.G. Mallard, National Institute of Standards and Technology, Gaithersburg MD. [doi:10.18434/T4D303](https://doi.org/10.18434/T4D303), (retrieved June 17, 2017).

2. Data for temperatures below 19.5 °C and lower were compiled from: Wolfram Alpha Widgets. <https://www.wolframalpha.com/widgets/view.jsp?id=1de7d2b90d554be9f0db1c338e80197d> (retrieved January 17, 2024).