

TABLE 1

*Some physical properties of pure water (after Dorsey, 1940)*

Molecular weight	18.0153
Heat of formation	285.89 kJmol <sup>-1</sup> (at 25°C and 1 atm)
Ionic dissociation constant	10 <sup>-4</sup> M <sup>-1</sup> (at 25°C and 1 atm)
Heat of ionization	55.71 kJmol <sup>-1</sup> (at 25°C and 1 atm)
Viscosity	8.949 mP (at 25°C and 1 atm)
Velocity of sound	1496.3 ms <sup>-1</sup> (at 25°C and 1 atm)
Density	0.9979751 g cm <sup>-3</sup> (at 25°C and 1 atm)
Freezing point	0°C (at 1 atm)
Boiling point	100°C (at 1 atm)
Isothermal compressibility	45.6 × 10 <sup>-6</sup> atm <sup>-1</sup> (at 25°C over the range 1–10 atm)
Specific heat at constant volume	4.1786 int.J (g°C) <sup>-1</sup> (at 25°C and 1 atm)
Thermal conductivity	0.00598 W cm <sup>-1</sup> °C <sup>-1</sup> (at 20°C and 1 atm)
Temperature of maximum density	3.98°C (at 1 atm)
Dielectric constant	81.0 (at 1 atm, 17°C, and 60 MHz)
Electrical conductivity	Less than 10 <sup>-8</sup> Ω <sup>-1</sup> cm <sup>-1</sup> (at 25°C and 1 atm)