

CONSTANTS and VALUES

Densities	
Alcohol	800 kg m ⁻³
Paraffin	800 kg m ⁻³
Water	1000 kg m ⁻³
Brine	1200 kg m ⁻³
Sea Water	1250 kg m ⁻³
Mercury	13600 kg m ⁻³
Linear Expansivities	
Steel	10 x 10 ⁻⁵
Iron	12 x 10 ⁻⁵
Copper	17 x 10 ⁻⁵
Brass	18 x 10 ⁻⁵
Specific Latent Heats	
Fusion of Ice	340000 J kg ⁻¹
Vaporisation of Water	2250000 J kg ⁻¹
Electrochemical Equivalents	
Hydrogen	11 x 10 ⁻⁸ kg K ⁻¹
Nickel	30 x 10 ⁻⁷ kg K ⁻¹
Copper	33 x 10 ⁻⁷ kg K ⁻¹
Silver	112 x 10 ⁻⁶ kg K ⁻¹
Specific Heat Capacities	
Brass	380 J kg ⁻¹ K ⁻¹
Copper	380 J kg ⁻¹ K ⁻¹
Iron	460 J kg ⁻¹ K ⁻¹
Aluminium	880 J kg ⁻¹ K ⁻¹
Ice	2100 J kg ⁻¹ K ⁻¹
Paraffin	2200 J kg ⁻¹ K ⁻¹
Glycerin	2400 J kg ⁻¹ K ⁻¹
Methylated Spirits	2500 J kg ⁻¹ K ⁻¹
Water	4200 J kg ⁻¹ K ⁻¹

- c Velocity of light in vacuo $2.997925 \times 10^8 \text{ m s}^{-1}$
- g Standard acceleration of gravity 9.80665 m s^{-2} or $9.80665 \text{ N kg}^{-1}$
(At Greenwich $g = 9.81183 \text{ m s}^{-2}$)

Speed of sound at sea level at 0°C = 331.7 m s^{-1}

$\pi = 3.142857$