

DATA SHEET

Speed of light in materials

<i>Material</i>	<i>Speed in m/s</i>
Air	3.0×10^8
Carbon dioxide	3.0×10^8
Diamond	1.2×10^8
Glass	2.0×10^8
Glycerol	2.1×10^8
Water	2.3×10^8

Speed of sound in materials

<i>Material</i>	<i>Speed in m/s</i>
Aluminium	5200
Air	340
Bone	4100
Carbon dioxide	270
Glycerol	1900
Muscle	1600
Steel	5200
Tissue	1500
Water	1500

Gravitational field strengths

	<i>Gravitational field strength on the surface in N/kg</i>
Earth	10
Jupiter	26
Mars	4
Mercury	4
Moon	1.6
Neptune	12
Saturn	11
Sun	270
Venus	9

Specific heat capacity of materials

<i>Material</i>	<i>Specific heat capacity in J/kg °C</i>
Alcohol	2350
Aluminium	902
Copper	386
Glass	500
Ice	2100
Iron	480
Lead	128
Oil	2130
Water	4180

Specific latent heat of fusion of materials

<i>Material</i>	<i>Specific latent heat of fusion in J/kg</i>
Alcohol	0.99×10^5
Aluminium	3.95×10^5
Carbon dioxide	1.80×10^5
Copper	2.05×10^5
Iron	2.67×10^5
Lead	0.25×10^5
Water	3.34×10^5

Melting and boiling points of materials

<i>Material</i>	<i>Melting point in °C</i>	<i>Boiling point in °C</i>
Alcohol	-98	65
Aluminium	660	2470
Copper	1077	2567
Glycerol	18	290
Lead	328	1737
Iron	1537	2747

Specific latent heat of vaporisation of materials

<i>Material</i>	<i>Specific latent heat of vaporisation in J/kg</i>
Alcohol	11.2×10^5
Carbon dioxide	3.77×10^5
Glycerol	8.30×10^5
Turpentine	2.90×10^5
Water	22.6×10^5

Radiation weighting factors

<i>Type of radiation</i>	<i>Radiation weighting factor</i>
alpha	20
beta	1
fast neutrons	10
gamma	1
slow neutrons	3