

SPECIFIC HEAT CAPACITY

The amount of heat required to raise the temperature of 1kg of a substance through 1K.

Units of specific heat capacity are Jkg⁻¹K⁻¹. It is measured by the standard technique of calorimetry.

Acetic Acid	1960	Acetone	2210	Acetylene	1590
Aluminium	900	Americium	140	Ammonia	2190
Antimony	209	Argon	519	Arsenic	326
Astatine	140	Barium	192	Benzene	1700
Beryllium	1820	Bismuth	121	Boron	1030
Brass	370	Bromine	448	Bronze	360
Cadmium	230	Caesium	234	Calcium	653
Carbon	711 graphite, 519 diamond	Carbon Dioxide	834	Carbon Disulphide	1000
Carbon Monoxide	1050	Carbon Tetrachloride	840	Cerium	184
Chlorine	477	Chloroform	960	Chromium	448
Cobalt	435	Concrete	3350	Copper	385
Cork	2050	Cyanogen	1720	Dysprosium	172
Erbium	167	Ethanol	2940	Ethylene	1500
Europium	138	Fluorine	824	Francium	140
Fused Silica	703	Gadolinium	234	Gallium	381
Germanium	322	Glass flint 500, crown pyrex 753	670	Glycerol	2400
Gold	130	Graphite	838	Hafnium	146
Helium	0.00519	Holmium	163	Hydrogen	14300
Hydrogen Chloride	796	Hydrogen Sulphide	1020	Ice	2100
Indium	238	Invar	460	Iodine	218
Iridium	134	Iron	448	Krypton	247
Lanthanum	201	Lead	130	Lithium	3390
Lutetium	155	Magnesium	1030	Magnesium Oxide	960
Manganese	477	Marble	880	Mercury Hg	138
Methane	2200	Methyl Alcohol	2500	Molybdenum	251
Neodymium	188	Neon	1030	Nickel	439
Niobium	264	Nitric Oxide	972	Nitrobenzene	1400
Nitrogen	1040	Nitrous Oxide	892	Nylon	1700
Oak	2390	Olive Oil	1970	Osmium	130
Oxygen	916	Palladium	243	Paraffin Oil	2130
Paraffin Wax	2140 to 2900	Petroleum	2140	Phenol	2350
Phosphorus 757 white, 670 red		Platinum	134	Polonium	126
Polymethyl Methacrylate Resin	1500	Polystyrene	1300	Polytetrafluoroethylene	1040
Polyvinyl Chloride	900	Potassium	753	Praseodymium	192
Promethium	184	Protactinium	121	Quartz	710
Radium	121	Radon	92	Rhenium	138
Rhodium	243	Rubidium	360	Ruthenium	238
Samarium	197	Sand	796	Scandium	556
Sea Water	3900	Selenium	322	Silicon	711
Silver	234	Silver Bromide	292	Sodium	1230
Sodium Chloride	854	Sodium I Fluoride	1088	Soft Solder	176
Stainless Steel	510	Steel	420	Strontium	284
Sulphur	732	Sulphur Dioxide	645	Tantalum	138
Technetium	243	Tellurium	201	Terbium	184
Thallium	130	Thorium	113	Thulium	159
Tin	218	Titanium	523	Toluene	1670
Tungsten	134	Turpentine	1760	Uranium	117
Uranium Oxide	240	Vanadium	481	Water	4190
Xenon	159	Ytterbium	146	Yttrium	297
Zinc	385	Zinc Sulphide	469	Zirconium	276