

SOLIDS			
Substance	Density	Sp. heat	Mol. Mass
	kg/m <sup>3</sup>	kJ/kg °C	kg/kmol
	$\rho$	$c_p$	$M$
Metals			
Aluminum	2,700	0.902	26.98
Bronze (76% Cu, 2% Zn, 2% Al)	8,280	0.400	50.12
Brass, yellow (65% Cu, 35% Zn)	8,310	0.400	64.29
Copper	8,900	0.386	63.55
Iron	7,840	0.450	55.85
Lead	11,310	0.128	207.20
Magnesium	1,730	1.000	24.31
Nickel	8,890	0.440	58.69
Silver	10,470	0.235	107.87
Steel, mild	7,830	0.500	55.71
Tungsten	19,400	0.130	183.85
Nonmetals			
Asphalt	2,110	0.920	200
Brick, common	1,922	0.790	59.49
Brick, fireclay (500°C)	2,300	0.960	78.96
Concrete	2,300	0.653	270.1
Clay	1,000	0.920	258.16
Diamond	2,420	0.616	12.01
Glass, window	2,700	0.800	60.08
Glass, pyrex	2,230	0.840	62.86
Graphite	2500	0.711	
Granite	2700	1.017	62.44
Gypsum or plaster boa	800	1.090	172.17
Ice (0°C)	921	2.110	18.02
Limestone	1,650	0.909	100.09
Marble	2,600	0.880	100.09
Plywood (Douglas Fir)	545	1.210	162.14
Rubber (soft)	1,100	1.840	68.12
Rubber (hard)	1,150	2.009	68.12
Sand	1,520	0.800	60.08
Stone	1,500	0.800	66.42
Woods, hard (maple, oak, etc.)	721	1.260	162.14
Woods, soft (fir, pine, etc.)	513	1.380	162.14

Source: Various handbooks, NIST ([www.nist.gov](http://www.nist.gov))  
 Values in red are estimates only.

LIQUIDS				
Substance	Temp.	Density	Specific heat	Mol. Mass
	°C	kg/m <sup>3</sup>	kJ/kg °C	kg/kmol
	$T$	$\rho$	$c_p$	$M$
Ammonia	25	602	4.8	17.03
Argon	-185.6	1,394	1.14	39.95
Benzene	20	879	1.72	78.11
Brine(20% sodium chloride by mass)	20	1150	3.11	26.1
n-Butane	-0.5	601	2.31	58.12
Carbon dioxide	0	298	0.59	44.01
Ethanol	25	783	2.46	46.07
Ethyl alcohol	20	789	2.84	46.07
Ethylene glycol	20	1,109	2.84	62.07
Glycerine	20	1,261	2.32	92.09
Helium	-268.9	146	22.8	4
Hydrogen	-252.8	71	10	2.02
Isobutane	-11.7	594	2.28	58.12
Kerosene	20	820	2	170.34
Mercury	25	13,560	0.139	200.59
Methane	-161.5	423	3.49	16.04
	-100	301	5.79	16.04
Methanol	25	787	2.55	32.04
Nitrogen	-195.8	809	2.06	28.01
	-160	596	2.97	28.01
Octane	20	703	2.1	114.23
Oil (light)	25	910	1.8	114.23
Oxygen	-183	1,141	1.71	32
Petroleum	20	640	2	95
Propane	-42.1	581	2.25	44.1
	0	529	2.53	44
	50	449	3.13	44
Refrigerant-134a	-50	1,443	1.23	102.03
	-26.1	1,374	1.27	102.03
	0	1,294	1.34	102.03
	25	1,206	1.42	102.03
Water	0	1,000	4.23	18.02
	25	997	4.18	18.02
	50	988	4.18	18.02
	75	975	4.19	18.02
	100	958	4.22	18.02