

## PROPERTIES OF COMMON METALS & ALLOYS

Metal or Composition @68° F (20° C)	Chemical Symbol	Specific Gravity	Weight per Cubic Foot in Pounds	Weight per Cubic Meter in Kilograms	Melting Point Degrees		Structure	Linear Expansion per Unit Length per Degrees F	Electrical Conductivity: Silver = 100%	Thermal Conductivity
					F	C				
Aluminum	Al	2.56	159.7	2558.07	1,218°	658°	M	0.0001233	63	237.0
Antimony	Sb	6.71	418.7	6706.74	1,166°	907°	B	0.0000587	3.59	24.3
Barium	Ba	3.75	234.0	3748.21	1,562°	850°	M	...	30.61	18.4
Bismuth	Bi	9.80	611.5	9795.01	520°	271°	B	0.0000731	1.4	7.9
Boron	B	2.60	162.2	2598.12	4,250°	2,343°	H	...	...	27.0
Brass (CDA-260)	...	8.53	534.1	8555.21	1,750°	954°	M	0.0001042	28.1	385.0
Bronze (CDA-220)	...	8.80	552.2	8845.14	1,870°	1,021°	B	0.0001024	44.1	380.0
Cadmium	Cd	8.60	536.6	8595.26	610°	321°	M	0.0001755	24.38	96.8
Calcium	Ca	1.57	98.0	1569.76	1,490°	810°	M	...	21.77	200.0
Carbon	C	2.20	138.1	2212.09	6,332°	3,500°	B	...	2.11	155.0
Chromium	Cr	6.50	405.6	6496.90	2,939°	1,615°	B	...	16	93.7
Cobalt	Co	8.65	539.8	8646.52	2,696°	1,480°	M	0.0000687	16.93	100.0
Copper	Cu	8.90	550.4	8816.31	1,981°	1,083°	M	0.0000926	97.67	401.0
Gold	Au	19.32	1,205.6	19311.30	1,945°	1,062°	M	0.0000817	76.71	317.0
Iridium	Ir	22.42	1,399.0	22409.18	4,260°	2,349°	M	0.0000356	13.52	147.0
Iron	Fe	7.85	498.8	7989.78	2,750°	1,510°	M	0.0000648	16.8	80.2
Lead	Pb	11.37	709.5	11364.77	621°	327°	S	0.0001505	8.42	35.3
Magnesium	Mg	1.74	108.6	1739.55	1,204°	651°	M	0.0001497	39.44	156.0
Manganese	Mn	7.42	463.0	7416.33	2,246°	674°	B	...	15.75	7.8
Mercury	Hg	13.58	847.4	13573.65	-38°	-39°	F	...	1.75	8.3
Molybdenum	Mo	8.56	534.2	8556.82	4,620°	2,549°	B	...	17.6	138.0
Nickel	Ni	8.80	549.1	8795.48	2,646°	1,452°	M	0.0000710	12.89	90.7
Platinum	Pt	21.04	1,312.9	21030.03	3,191°	1,755°	M	0.0000499	14.43	71.6
Potassium	K	.87	54.3	869.78	144°	62°	S	0.0004611	19.62	102.5
Silver	Ag	10.53	657.1	10525.43	1,761°	960°	M	0.0001067	100	429.0
Sodium	Na	.98	61.1	978.70	207°	97°	S	...	31.98	141.0
Steel	Fe	7.80	486.7	7795.96	2,500°	1,371°	M	0.0000638	12	73.6
Tantalum	Ta	16.65	1,036.1	16596.25	5,462°	3,016°	M	...	12.88	57.5
Tellurium	Te	6.25	390.0	6247.02	846°	452°	B	0.0002048	0.001	2.4
Tin	Sn	7.29	454.8	7284.99	449°	231°	M	0.0001276	14.39	66.6
Titanium	Ti	3.54	220.0	3523.96	3,272°	1,800°	M	...	13.73	46.1
Tungsten	W	18.77	1,171.2	18760.28	6,152°	3,400°	B	...	14.88	174.0
Vanadium	V	5.50	343.2	5497.38	3,128°	1,720°	M	...	4.95	30.7
Zinc	Zn	7.15	446.1	7145.63	787°	419°	M	0.0001653	29.57	116.0

Structure: B = Brittle F = Fluid H = Hard M = Malleable S = Soft

Thermal Conductivity = Watts/meter/degree Kelvin(at 300°K)