

Elements & Alloys

This chart is loaded with information about the metals most commonly used in craft work. Familiarity with the melting points, make up, and specific gravity will help you understand the properties of each material.

	Metal or alloy	Au	Ag	Cu	Zn	Other	Melting Point		Sp.Grav.
Al	Aluminum					100 Al	660°C	1220°F	2.7
Sb	Antimony					100 Sb	631	1168	6.6
Bi	Bismuth					100 Bi	271	520	9.8
260	Cartridge brass			70	30		954	1749	8.5
226	Jewelers brass			88	12		1030	1886	8.7
220	Red brass			90	10		1044	1910	8.8
511	Bronze			96		4 Sn	1060	1945	8.8
Cd	Cadmium					100 Cd	321	610	8.7
Cr	Chromium					100 Cr	1890	3434	6.9
Cu	Copper			100			1083	1981	8.9
Au	Gold (fine)	100					1063	1945	19.3
920	22K yellow	92	4	4			977	1790	17.3
900	22K coinage	90	10				940	1724	17.2
750	18K yellow	75	15	10			882	1620	15.5
750	18K yellow	75	12½	12½			904	1660	15.7
750	18K green	75	25				966	1770	15.6
750	18K rose	75	5	20			932	1710	15.5
750	18K white	75				25 Pd	904	1660	15.7
580	14K yellow	58	25	17			802	1476	13.4
580	14K green	58	35	7			835	1535	13.6
580	14K rose	58	10	32			827	1520	13.4
580	14K white	58				42 Pd	927	1700	13.7
420	10K yellow	42	12	41	5		786	1447	11.6
420	10K yellow	42	7	48	3		876	1609	11.6
420	10K green	42	58				804	1480	11.7
420	10K rose	42	10	48			810	1490	11.6
420	10K white	42				58 Pd	927	1760	11.8
Fe	Iron					100 Fe	1535	2793	7.9
Pd	Lead					100 Pb	327	621	11.3
Mg	Magnesium					100 Mg	651	1204	1.7
	Monel Metal			33		60 Ni, 7 Fe	1360	2480	8.9
Ni	Nickel					100 Ni	1455	2651	8.8
752	Nickel silver			65	17	18 Ni	1110	2030	8.8
Pd	Palladium					100 Pd	1549	2820	12.2
	Old pewter					80 Pb, 20 Sn	304	580	9.5
Pt	Platinum					100 Pt	1774	3225	21.4
Ag	Silver (fine)	100					961	1762	10.6
925	Sterling		92½	7½			920	1640	10.4
800	Coin silver		80	20			890	1634	10.3
	Mild steel					99 Fe, 1 C	1511	2750	7.9
	Stainless steel					91 Fe, 9 Cr	1371	2500	7.8
Sn	Tin					100 Sn	323	450	7.3
Ti	Titanium					100 Ti	1800	3272	4.5
Zn	Zinc				100		419	786	7.1

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