

BRASS ALLOYS

Alloy name	Proportion by weight (%)					Notes
	Copper	Zinc	Tin	Lead	Other	
Abyssinian gold	90	10				
Admiralty brass	69	30	1			The tin prevents the loss of zinc in several conditions.
Aich's alloy	60,66	36,58	1,02		1,74% iron	Thanks to its superior corrosion resistance, toughness, and hardness, it has been widely preferred in marine applications, particularly, the protection of the bottom of the ships. However, modern protection methods such as cathodic protection have been preferred recently. It has a bright gold appearance.
Aluminum brass	77,5	20,50			2% aluminum	Aluminum addition improves the corrosion resistance of the alloy. It is widely used in the production of heat exchangers and condenser tubes.
Arsenical brass					Arsenic; frequently aluminum	Used in the production of fireboxes.
Cartridge brass (C260)	70	30	—	≤ 0,07		Good cold working performance. Used in the production of ammunition cases, plumbing fittings, and tools.
Common brass	63	37				Also known as <i>rivet</i> brass. Cheap and ideal for cold working.
Delta metal	55	41–43			1–3% iron with the balance consisting of various other metals.	The proportions of the metal additions to the alloy make the material harder and suitable for the production of valves and bearings.
DZR brass					Arsenic	Brass with a little arsenic addition for obtaining a dezincification resistant alloy.
Free machining brass (C360)	61,5	35,5		3	0,35% iron	Also known as 360 brass or C360 brass. High machinability. Lead content: 2,5–3,7%
Gilding metal	95	5				Brass type with the lowest hardness value commonly available. Gilding metal is generally used in the production of bullet jackets, such as full metal jacket bullets. Almost red in color.
High brass	65	35				Shows high tensile strength and widely used in the production of rivets screws, and springs.
Lead-free brass				< 0,25		The Law of California Assembly Bill 1953 (AB1953) limited the lead content in the alloy by stating "not more than 0,25 percent lead content". This limit was 4% previously.
Leaded brass				> 0		An alpha-beta brass produced by lead addition to improve machinability.
Low brass	80	20				Light golden in color, high ductility; used in the production of flexible metal hoses and metal bellows.
Manganese brass	70	29			1,3% manganese	Most notably used in the production of golden dollar coins in the United States.
Muntz metal	60	40			Traces of iron	Used as lining material on boats.
Naval brass	59	40	1			Shows similar characteristics with admiralty brass. Also called as Tobin bronze.
Nickel brass	70	24,50			5,5% nickel	Used in the production of coins of the pound sterling currency in the UK. Also the main substance of the bi-metallic One Euro coin and the central part of the Two Euro coin.
Nordic gold	89	5	1		5% aluminum	Used in the production of 10, 20, and 50 cents of the Euro currency.
Orichalcum	75-80	15-20		Trace	Trace amounts of nickel and iron	Found in 39 ingots recovered from an ancient shipwreck in Gela, Sicily.
Prince's metal	75	25				An alpha type brass. Used as an imitation of gold due to its similar color. Also known as <i>Prince Rupert's metal</i> since the alloy was named after Prince Rupert of the Rhine.
Red brass, Rose brass (C230)	85	5	5	5		An alloy of copper, zinc, and tin which is also known as gunmetal in the US. This alloy is considered both a brass and a bronze. Also, "red brass" is used as an alternative name for copper alloy C23000 with a composition of 14–16% zinc, a minimum 0,05% iron, and minimum 0,07% lead content, and copper. It is also used for ounce metal, another copper-zinc-tin alloy.
Rich low brass, Tombac		5–20				Widely used in jewelry manufacturing.
Silicon tombac	80	16			4% silicon	Used as an alternative in the production of investment cast steel parts.
Tonval brass				> 0		Also known as CW617N, CZ122, or OT58. Since it is susceptible to dezincification, it is not recommended for marine use.
Yellow brass	67	33				An alternative term for 33% zinc brass in the US.