

Name That Metal! Information Sheet

Metal	Density	Melting Point	Boiling Point	Ferro-magnetic?	Atomic Weight	Electronegativity
copper (Cu)	8.96 g·cm ⁻³	1084.62 °C 1984.32 °F	2562 °C 4643 °F	No	63.546	1.90
aluminum (Al)	2.70 g·cm ⁻³	660.32 °C 1220.58 °F	2519 °C 4566 °F	No	26.982	1.61
Zinc (Zn)	7.14 g·cm ⁻³	419.53 °C 87.15 °F	907 °C 1665 °F	No	65.38	1.65
iron (Fe)	7.874 g·cm ⁻³	1538 °C 2800 °F	2862 °C 5182 °F	Yes	55.845	1.83
brass	8.73 g·cm ⁻³	940 °C 1724 °F	2300 °C 4172 °F	No	NA	NA

Interesting facts about....

Copper

- The Statue of Liberty is made from 179,000 pounds of copper.
- The average home contains 400 pounds of copper, which is used for electrical wiring, pipes and appliances. The average car contains 50 pounds of copper.

Source: http://www.crescentcitycopper.com/_blog/Copper_Blog/post/15_Fun_Facts_About_Copper/

Aluminum

- American consumers and industry throw away enough aluminum to rebuild the entire U.S. commercial air fleet every three months.
- 20% of the aluminum made in North America is used to make drinking cans, food containers and foil.
- 95% of aluminum gets re-used from building demolitions.

Source: <http://www.aluminum.org/AM/CM/ContentDisplay.cfm?ContentFileID=61474&FusePreview=Yes>

Zinc

- It is believed that zinc's anti-oxidant properties keep the skin and muscles from aging.
- China is the largest country to produce zinc, making more than 3,500,000 tons every year!

Source: http://www.infobarrel.com/Interesting_Facts_About_Zinc_Zn#eTbGkE7RhZf7RQCK.99

Iron

- The amount of iron in the human body is enough to make a nail.
- The sun and other stars contain iron. *Source* <http://fun.yukozimo.com/facts-about-iron/>
- Indians were one of the first peoples to master the art of extracting and smelting iron many years before Europeans. The Iron Pillar in Delhi is more than 1600 years old and has never corroded or rusted. *Source:* http://www.infobarrel.com/Interesting_Facts_About_Iron_Fe#KLSxkx5WWrdPhW04.99

Brass

- Brass alloy contains 3% to 45% zinc, with the remainder being copper.

Source http://www.infobarrel.com/Interesting_Facts_About_Zinc_Zn#eTbGkE7RhZf7RQCK.99

Metal	Uses	Interesting Facts
copper (Cu)	electrical wiring, pipes, building construction, radiators, brakes, gutters, roofs, electric motors ⁱ	<ul style="list-style-type: none"> The Statue of Liberty, built in 1886, is the largest use of copper in a single structureⁱⁱ
aluminum (Al)	packaging (cans, foils, bottle tops), airplanes ⁱⁱⁱ , cars (wheels, impellers, hoods, mirrors), construction (casting, pipes, skylights, rods, ladders) ^{iv}	<ul style="list-style-type: none"> 90% of automotive aluminum is recovered and recycled. 33% of aluminum made in North America is used to build cars, buses, planes, boats and rockets.^v
zinc (Zn)	batteries, paint, rubber, toothpaste, automotive parts, electrical and hardware industries, ^{vi} window and door frames	<ul style="list-style-type: none"> The Romans were the first to use zinc in 30 BC. Ornaments and coins were among early creations.^{vii}
iron (Fe)	machinery, buildings, railings, tools (tie-rods, bolts, straps), bridges, kitchen appliances, automobile parts, ship frames ^{viii}	<ul style="list-style-type: none"> The Iron Bridge in England, built in 1781, is the first arch bridge in the world made of cast iron.^{ix}
brass	zippers, locks, bearings, gears, mirrors, musical instruments, fixtures, art ^x , plumbing, cable glands ^{xi}	<ul style="list-style-type: none"> The trumpet and horn are the oldest instruments made of brass. First used in orchestras in the early 1700s, the French horn was one of the first instruments made of brass.^{xii}

ⁱ <http://en.wikipedia.org/wiki/Copper#Applications>

ⁱⁱ <http://geology.com/usgs/uses-of-copper/>

ⁱⁱⁱ <http://sam.davyson.com/as/physics/aluminium/siteus/uses.html>

^{iv} <http://www.buzzle.com/articles/aluminum-uses-of-aluminum.html>

^v <http://www.aluminum.org/AM/CM/ContentDisplay.cfm?ContentFileID=61474&FusePreview=Yes>

^{vi} <http://wanttoknowit.com/uses-of-zinc/>

^{vii} <http://en.wikipedia.org/wiki/Zinc#Applications>

^{viii} <http://www.buzzle.com/articles/iron-uses-of-iron.html>

^{ix} http://en.wikipedia.org/wiki/The_Iron_Bridge

^x <http://science.yourdictionary.com/articles/what-is-brass-made-from.html>

^{xi} <http://www.mehta-group.com/brass-tube-for-general-engineering.html>

^{xii} http://www.ehow.com/list_6620433_metal-brass.html