



HSM Wire International, Inc

Ph: 330-244-8501 Fax: 330-244-8561

www.hsmwire.com



Alloy 411 - Copper Zinc Brass

Definition: C41100 is categorized as Wrought Copper Alloy. It is commonly called UNS C41100 Copper-zinc brass.

Applications: It is a source material in many processes including the creation of electrical components and bullet-making. Alloy 411 is a component in such objects as trumpets and cymbals, doorknobs and locks, ammunition, valves, gears, and bearings. It is a common alloy used to make coins. This alloy plays an important role in manufacturing tools for use around explosive gases, and in cryogenics. It is used as a test control metal for protective coatings research. Other items include plates, tubes, pipes, forgings, castings, bushings, washers, terminals, connectors, flexible metal hose, and conductors.

Nominal Composition:	Cu%	Sn%	Zn%
	91%	0.5%	8.5%

Mechanical Properties

Properties		Conditions	
		T (°C)	Treatment
Density (x 1000 kg/m ³)	8.8 - 8.94	25	
Poisson's Ratio	0.34	25	
Elastic Modulus (GPa)	117	25	
Tensile Strength (MPa)	269-731		
Yield Strength (MPa)	76-496		
Elongation (%)	13	25	(Flat Products, wire)

*To be used as a guideline only.

Copyright ©2013 HSM Wire International

R1.06.26.2013