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GOLD BRAZE 6037In

TECHNICAL DATA

NOMINAL COMPOSITION	Gold	60% ± 1.0
	Copper	37% ± 1.0
	Indium	3.0% ± 0.5
	<u>Vacuum Grade Trace Elements</u>	
	Cadmium	0.001% max.
	Zinc	0.001% max.
	Phosphorus	0.002% max.
	Lead	0.002% max.
	Carbon	0.005% max.
	Other volatile elements each*	0.002% max.
	Volatile elements total	0.010% max.
	Total non-volatile elements (Grade 1)	0.01% max.
Total non-volatile elements (Grade 2)	0.05% max.	
<p>*Elements with a vapor pressure higher than 10^{-7} torr at 932°F (such as Mg, Sb, K, Li, Tl, S, Cs, Rb, Se, Te, Sr, and Ca) are limited to 0.001% each for Grade 1 and 0.002% for Grade 2.</p>		
PHYSICAL PROPERTIES	Color	Gold/Brass
	Solidus	1580°F (860°C)
	Liquidus	1652°F (900°C)
	Recommended Brazing Temperature	1702-1752°F (928-956°C)
	Density (g/cm³)	13
	Yield Strength (MPa)	304.8
	Tensile Strength (MPa)	517.1
	Elongation (%)	37
	Thermal Conductivity (W/(m•K))	47
	Electrical Conductivity (x10⁶/(ohm•m))	8.1
Electrical Resistivity (x10⁻⁹ ohm•m)	163	
USES	Gold Braze 6037In can be used on any of the common ferrous and non-ferrous alloys. This alloy exhibits good wetting characteristics and has a lower brazing temperature than other Au-Cu alloys.	
BRAZING CHARACTERISTICS	Gold Braze 6037In is generally used in reducing, vacuum, or inert atmosphere. The composition of the alloy allows for use in applications where braze filler metals low in volatile constituents are required.	

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design and brazing technique. For controlled atmosphere brazing or vacuum brazing the recommended radial joint clearance for gold base alloys fall within 0.000in – 0.002in (0.00mm-0.05mm) range.

SPECIFICATIONS

Gold Braze 6037In conforms to: N/A

AVAILABLE FORMS

Wire, strip, engineered preforms and specialty preforms per customer specification, powder and paste.

Individuals requiring further information and Engineering Specification Documents may wish to contact the Engineering Society for Advanced Mobility, Land Sea Air and Space, The Society of Automotive Engineers <http://www.sae.org/> (SAE AMS) or The American Welding Society (AWS) <http://aws.org/>

NOTE:**DISCLAIMER**

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