Prince & Izant Company
12999 Plaza Drive
Cleveland, Ohio 44130
T: 216-362-7000
F: 216-362-7456
princeizant.com

GOLD BRAZE 92 (BVAu-8)

TECHNICAL DATA

NOMINAL COMPOSITION

Gold	92.0% ± 1.0
Palladium	8.0% ± 0.5
Vacuum Grade Trace Elements	
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.

*Elements with a vapor pressure higher than 10^{-7} torr at 932ºF (such as Mg, Sb, K, Li,TI,S,Cs,Rb,Se,Te,Sr, and Ca) are limited to 0.001% each for Grade 1 and 0.002% for Grade 2.

PHYSICAL PROPERTIES

Color	Gold Silver
Solidus	2190 ºF (1199 ºC)
Liquidus	2266 ºF (1241 ºC)
Density (Troy Oz/in.^{3})	9.72
Yield Strength (MPa)	110
Tensile Strength (MPa)	198
Thermal Conductivity (W/(m*K))	105
CTE (x10^{-6}/^{0}C)	17.8
Electrical Resistivity (x10^{-9} ohm*m)	73
Electrical Conductivity (x10^6 / (ohm*m)	13.7
Elongation (%)	23
Recommended Brazing Temperature	2316º-2366ºF (1269-1297ºC)

USES

BAu-8 is a very ductile alloy generally used in high temperature applications due to its high oxidation resistance. It wets well to tungsten, molybdenum, tantalum and other high-temperature superalloys.

BRAZING CHARACTERISTICS

Wets well to superalloys and provides high ductility due to high level of gold. BAu-8 exhibits excellent corrosion and oxidation resistance due to the stable nature of its components.

PROPERTIES OF BRAZED JOINTS	The properties of a brazed joint are dependent upon the base metal, joint design and brazing technique. For atmospheric brazing the recommended radial joint clearance for gold base alloys fall within .0015-.002” range.
AVAILABLE FORMS	Strip, wire, powder, and preforms to specifications.
SPECIFICATIONS	Gold Braze 92 conforms to: Unified Numbering System (UNS) P00927, American Welding Society (AWS) A5.8/A5.8M BVAu-8 Grade 1 and Grade 2

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: