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SILVERBRAZE 38 (BAg-34)

TECHNICAL DATA

NOMINAL COMPOSITION

Silver	38.0% ± 1.0
Copper	32.0% ± 1.0
Zinc	28.0% ± 2.0
Tin	2.0% ± 0.5
Other Elements Total	0.15% Max

PHYSICAL PROPERTIES

Color	Pale Yellow
Solidus	1200°F (648°C)
Liquidus	1330°F (721°C)
Recommended Brazing Temperature	1380-1430°F (748-776°C)
Density (Troy oz/in^3)	4.77
Specific Gravity	9.06
Electrical Conductivity (%IACS)	18.0
Electrical Resistivity (Microhm-cm)	9.50

USES

SB 38 is a good general purpose low temperature brazing filler metal for use in cadmium-free brazing applications, such as air conditioning and refrigeration which involve the joining of steels, copper, copper alloys and nickel alloys.

BRAZING CHARACTERISTICS

SB 38 is a free-flowing, low temperature filler metal with excellent wetting characteristics of most ferrous and non-ferrous base metals, and is a good substitute for cadmium-bearing filler metals with similar silver content. The material is best suited for narrow gap situations (0.001” – 0.005” radial joint clearance). Flux should be used with this filler metal.

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal. The results listed below were generated from brazed butt joints which were tested under standard room temperature conditions.

	Tensile Strength (lbs/in^2)	Elongation (%, 2” gage length)
Low Carbon Steel	55,000-65,000	8-13
304 Stainless Steel	80,000-85,000	2-5
Copper	31,000-35,000	25-35
Brass	35,000-45,000	15-30

SPECIFICATIONS

Silver Braze 38 alloy conforms to: Unified Numbering System (UNS) P07380 and American Welding Society (AWS) A5.8/A5.8M BAg-34

AVAILABLE FORMS

Wire, strip, engineered preforms, 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:

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