

Bellman-Melcor LLC
 7575 West 183rd Street
 Tinley Park, Illinois 60477
Phone: 1-800-367-6024 • **Fax:** 1.888.BRAZE-IT-272.9348
Email: sales@bellmanmelcor.com • **Website:** www.bellmanmelcor.com



Item # Brazeit B-72, Cadmium Free Brazing Alloys

Brazeit B-72 is the eutectic composition of the silver-copper system. It is suitable for use in a controlled atmosphere brazing without the use of a paste flux. When molten, Brazeit B-72 is very fluid and may flow out over the work surfaces during some furnace brazing applications. The wetting action on ferrous metals is limited, minimizing its use on carbon steel. Improved wetting observed when furnace brazing of stainless steel with silver-copper brazing alloys. Most applications for this alloy are on copper and nickel base alloys.

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Nominal Composition

Silver (Ag)	72.0 ± 1.0%
Copper (Cu)	Balance
Zinc (Zn)	0
Nickel (Ni)	0
Total Other Elements	0.15% Max.

Specifications

Melting Pt.	1435 °F 780 °C
Flow Pt.	1435 °F 780 °C
MBT ¹	1650
AWS A5.8	BAG-8
ASME	BAG-8
AMS	4772
Resale Options ²	Brazing Paste Brazing Rod Brazing Strip Brazing wire
Preform Options	Brazing Discs Brazing Rings Brazing Washers Custom Designs Cut-Offs Edgewounds
Approx. Wire Length (BCuP/lb.) (BAG/Tr.oz)	250 in; 0.031 diameter 28 in; 0.093 diameter 60 in; 0.062 diameter

¹ Recommended Brazing Temperature

² Brazing Wire & Brazing Strip - Spooling Available
 Brazing Rod - Flux Coating Available

Physical Constants

Solidus	1435 °F 779 °C
Liquidus	1435 °F 779 °C
Brazing Range	1435 to 1650 °F 779 to 899 °C
Specific Gravity	9.06
Density	5.24 T.oz./cu.in.
Electrical Conductivity	87.0 % IACS
Electrical Resistivity	2.00 Micro ohm-cm
Color	White

Properties of Brazed Joints

Generally, the joint strength using Brazeit B-72 will surpass the strengths of the base metals. Strength is a function of the base metals being joined, type of joint, design of joint, joint clearances, and brazing procedures. The recommended maximum operation temperature for Brazeit B-72 is up to 400° in continuous service and up to 600° in intermittent service. Where improved corrosion resistance is needed, nickel may be added to the eutectic composition.

Applications

Typical applications are the brazing of ferrous, nonferrous, and dissimilar metals and alloys with close joint clearances.

Good for atmosphere and vacuum furnace brazing of ferrous and non ferrous. Used in critical electronic and aerospace brazements.

Safety Information

It is essential that adequate ventilation be provided so that personnel will not inhale gases and fumes while brazing. The operation and maintenance of brazing equipment or facility should conform to the provisions of American National standard (ANSI) Z49.1, "Safety in Welding and Cutting." For more complete information, refer to the Material Safety Data Sheet for Brazeit B-72.

Available Forms

Standard forms of Brazeit B-72 are brazing wire, brazing strip, and brazing preforms.