

Brazelt 35(BAg-2)

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|---------------------------------------|---------------------------|
| Nominal Composition: | |
| Silver | 35.00 ± 1.0% |
| Copper | 26.0 ± 1.0% |
| Zinc | 21.0 ± 2.0% |
| Cadmium | 18.0 ± 1.0% |
| Total other Elements | 0.15 % Max |
| Physical Constants: | |
| Solidus | 1125°F (607°C) |
| Liquidus | 1295°F (702°C) |
| Brazing Range | 1295 - 1550°F (702-843°C) |
| Specific Gravity | 9.29 |
| Density (lb/cu in) | 4.90 |
| Electrical Conductivity (% IACS) | 27.5 |
| Electrical Resistivity (Michroh-m-cm) | 6.26 |
| Color | Light Yellow |

DESCRIPTION:

Brazelt 35 is an alloy with a melting range suitable for brazing steel, stainless steel, copper, copper alloys, nickel, nickel alloys, or combinations of these metals. Brazelt 35 is free flowing and suited for general purpose work. Its broader melting range is helpful where clearances are not uniform. During melting, Brazelt 35 passes from a solid state to a mushy or plastic state and progressively to a liquid. If heated slowly through this plastic state (1125° - 1295°F), the liquid portion may flow from the solid portion. This causes a separation of the alloy into a low-temperature melting (fluid) portion and a high-temperature melting (solid) portion. This phenomenon is called liquation. The high temperature melting portion will melt only above the normal brazing temperature of Brazelt 35. For this reason, Brazelt 35 should be heated rapidly through the melting range.

PROPERTIES OF BRAZED JOINTS:

Generally, the joint strength using Brazelt 35 surpasses 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 operating temperatures for Brazelt 35 is up to 400°F (continuous service) and 600°F (intermittent service). Where improved corrosion resistance is needed, Brazelt A-50N and Brazelt A-40N2 are recommended over silver base filler metals not containing nickel.

APPLICATIONS:

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

SPECIFICATIONS:

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| AWS A5-8 | BAg-2 |
| ASME | BAg-2 |
| QQ-B-654 | Grade VIII |
| AMS | 4768 |
| MIL-B-15345 | Grade VIII |

SAFETY INFORMATION:

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 Brazelt 35.

AVAILABLE FORMS:

Standard forms of Brazelt 35 are wire, strip and preforms.