Description

S-Bond® 200-1 is a Sn-Zn-Sb based active solder joining a range of metals, light metals and ceramic materials.

Melting Range

- Solidus Temperature: 390,2º F (199º C)
- Liquidus Temperature: 444,2º F (229º C)
- Joining Temperature: 482 – 536º F (250 – 280º C)

Physical Properties

- Density: 0.264 lbs/in^3 (7.2 g/cc)
- Thermal Coefficient of Expansion from R.T. to 300º F (25 – 150º C): ~19 x 10^{-6}/ ºC
- Electrical Resistivity (ρ): 1.6µ–ohm-m
- Thermal Conductivity:
  - Intrinsic: 48 W/mK

Mechanical Properties

- Tensile Strengths: UTS 0.2%Y.S.
  - 25º C…….. 7.8 ksi (53 MPa) 5.6 ksi (38 MPa)
  - 75º C…….. 6.2 ksi (42 MPa) 4.7 ksi (32 MPa)
  - 175º C…….. 3.9 ksi (26 MPa) 3.4 ksi (23 MPa)
  - 190º C…….. 3.9 ksi (26 MPa) 3.0 ksi (20 MPa)
- Joint Strength (R.T.):
  - Aluminum to Aluminum 2.9 – 4.3 ksi (20 – 30 MPa)
  - Steel to Steel 2.9 – 7.5 ksi (20 – 52 MPa)
  - Stainless Steel (Type 304) 2.6 – 3.6 ksi (18 – 25 MPa)
  - Copper to Copper 2.9 – 5.8 ksi (20 – 40 MPa)
  - Aluminum to Steel 4.8 – 6.5 ksi (33 – 45 MPa)
  - Al:SiC to Metals 4.4 – 6.0 ksi (30 – 41 MPa)
  - Glass to Metal 3.5 – 5.1 ksi (24 – 35 MPa)

Joint Sealing Capabilities

- Not specified

Corrosion

- Good atmospheric protection
- Other corrosion data, updates or special requests…. Please call.

EUROMAT GMBH does not guarantee the correctness of the above values. Values were determined in the laboratory and may vary depending on the batch. We recommend that you check the values yourself after receipt of the goods.

EUROMAT® GmbH -Industrial Surface Solutions-
Hermann-Hollerith-Strasse 6 in D-52499 Baesweiler-Aachen
Tel: +49 (0) 2401 6072866 Fax: +49 (0) 2401 6072855
input@euromat.de www.euromat.de