Description

S-Bond® 130-1 is a Sn-In-Ag-Ti based active solder joining a range of metals, light metals and ceramic materials.

Melting Range

- Solidus Temperature: 266 °F (130 °C)
- Liquidus Temperature: 284 °F (140 °C)
- Joining Temperature: 293 – 302 °F (145– 150 °C)

Physical Properties

- Density: 8.4 g/cc
- Thermal Coefficient of Expansion from R.T. to 300 °F (25 – 100 °C): ~19 x 10^{-6}/ °C
- Electrical Resistivity (ρ): 11 – 12 µ–ohm-m
- Thermal Conductivity:
  - Intrinsic: 65 W/mK

Mechanical Properties

- Tensile Strengths: UTS 0.2%Y.S.
  - 25 – 75 °C 35 MPa
- Joint Strength (R.T.):

Aluminum to Aluminum:	20 – 25 MPa
Steel to Steel:	20 – 30 MPa
Stainless Steel (Type 304):	18 – 25 MPa
Copper to Copper:	20 – 30 MPa
Aluminum to Steel:	20 – 25 MPa
Al:SiC to Metals:	30 – 41 MPa
Glass to Metal:	24 – 35 MPa

Joint Sealing Capabilities

- Hermetic Seals on most materials ~5 x 10^{-10} mbar*L/sec (helium leak rate)

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.

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