OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. WARNING: These products are not designed for use in, and should not be used for, human applications.
General Description

OMEGA’s OB-101 Epoxy Cement is a versatile, room temperature cure, two-part epoxy cement. It is designed to permanently bond OMEGA’s CO series, cement-on and beaded wire thermocouples, and other sensors to a wide variety of materials. OB-101 has many exceptional characteristics including:

- Resists temperatures to 221°F (105°C)
- Resists oil, solvents and most acids
- Heat conductive and tensile shear resistant
- Excellent electrical insulator
- Excellent mechanical bonding characteristics
- Adheres to most surfaces

OMEGABOND® OB-101 Epoxy Cement may be used with many materials including aluminum, steel, various stainless steels, copper, brass, black iron, wood, porcelain, brick, paper products, PVC, PVDC, polycarbonate, neoprene, cellulose acetate, hand board, and most plated surfaces.

Handling Information

**CAUTION**

- Avoid prolonged breathing of vapors - work in well ventilated area
- Protect skin against contamination
- Protect eyes against contamination
- Do not take internally

**Shelf Life:** OMEGA’s OB-101 has a shelf life of one year when stored in unopened, tightly sealed containers at 70°F.

Solvent

Methylene chloride may be used to remove excess OB-101 before curing. After curing, methylene chloride may also be used to dissolve the epoxy, but with greater difficulty.

Directions For Use

1. Clean the surfaces to be bonded with solvents or detergents. Plastic surfaces should be lightly sanded.

2. When using OB-101 Cement in can kits, dispense, as indicated below, parts by volume or weight of resin and hardener on a mixing surface side by side. Blend thoroughly, using a mixing stick, until the mixture is uniform in texture and color.

   **Mix Ratio:**
   - 100 parts of Part A
   - 100 parts of Part B (by volume)
   - 180 parts of Part B (by weight)
Directions For Use (cont’d)

3. If supplied in twin packs, remove partition dividers, blend and mix the two parts together within the pouch by kneading. After mixing thoroughly (mixture should be uniform in texture and color), snip off corner of pack to dispense.

4. Apply the thixotropic, off-white mixture to the clean surfaces and bring them together, squeezing out the excess. Only contact pressure is normally required.

Curing

Allow about four hours for initial set at room temperature (75°F, 24°C). Full cure will develop during the following 24 hours. Cure may be accelerated by moderate heat.

Physical Properties*

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Temperature</td>
<td>-67°F to 221°F (-55°C to 105°C)</td>
</tr>
<tr>
<td>Thermal Conductivity (BTU) (in/hr) (ft²) (°F):</td>
<td>7.2</td>
</tr>
<tr>
<td>Thermal Conductivity (cal) (cm/sec) (cm²) (°C):</td>
<td>0.0025</td>
</tr>
<tr>
<td>Volume Resistivity, ohm-cm:</td>
<td>10¹⁵</td>
</tr>
<tr>
<td>Tensile Shear, ½” (1.27cm overlap, psi:</td>
<td>2,200, min. (154 kg/sq. cm)</td>
</tr>
<tr>
<td>Flexural Strength, psi:</td>
<td>12,000, min. (840 kg/sq. cm)</td>
</tr>
<tr>
<td>Coefficient of Thermal Expansion:</td>
<td>20 x 10⁻⁶ in/in/°F (36 x 10⁻⁶ in/in/1°C)</td>
</tr>
<tr>
<td>Chemical and Solvent Resistance:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Color:</td>
<td>White</td>
</tr>
</tbody>
</table>

* Determined under laboratory conditions using applicable ASTM procedures. Actual field data may vary. Do not use Physical Properties for warranty specifications.

NOTE

The Material Safety Data Sheet (MSDS-0107) for OMEGA’s OB-101 cement is included with each cement kit.