M-Bond 610

Strain Gage Adhesive for Stress Analysis and Transducer Applications

OTHER ACCESSORIES USED IN AN M-BOND 610 INSTALLATION:
- CSM Degreaser or GC-6 Isopropyl Alcohol
- Silicon-Carbide Paper
- M-Prep Conditioner A
- M-Prep Neutralizer 5A
- GSP-1 Gauze Sponges
- CSP-1 Cotton Tip Applicators
- MJG-2 Mylar® Tape
- TFE-1 Teflon® Film
- HSC Spring Clamp
- GT-14 Pressure Pads and Backup Plates

DESCRIPTION

Two-component, solvent-thinned, epoxy-phenolic adhesive for high-performance applications, including high-precision transducers. Solids content 22%. Widest temperature range general-purpose adhesive available. Low viscosity, capable of gluelines <0.0002 in (0.005 mm). Extremely thin, hard, void-free gluelines minimize creep, hysteresis, and linearity problems. Cure must begin within four hours of application.

CHARACTERISTICS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>DETAILS</th>
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<tbody>
<tr>
<td>ELONGATION CAPABILITIES</td>
<td>1% at –452° (–269°C), 3% at +75°F (+24°C), 3% at +500°F (+260°C).</td>
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<tr>
<td>SHELF LIFE</td>
<td>5 months from the date of manufacture on the label (minimum published 4 months) when stored unmixed at +75°F (+24°C); or 7 months from the date of manufacture on the label (minimum published 6 months) when stored unmixed refrigerated upon receipt at +40°F (+5°C). Refrigerated storage recommended. Refer to product label.</td>
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<tr>
<td>POT LIFE</td>
<td>6 weeks at +75°F (+24°C); 12 weeks at +40°F (+5°C).</td>
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<tr>
<td>CLAMPING PRESSURE</td>
<td>10 to 70 psi (70 to 480 kN/m²) Optimum: 30 to 40 psi (200 to 275 kN/m²)</td>
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CURE REQUIREMENTS* FOR STRESS ANALYSIS

Recommended Cure:
*1 hour at +350°F (+177°C).

Recommended Postcure:
2 hours at 50° to 75°F (30° to 40°C) above maximum operating temperature or cure temperature, whichever is higher.

CURE REQUIREMENTS* FOR TRANSDUCERS

Recommended Postcure:
2 hours at +400° to +450°F (+205° to +232°C) after wiring.

*Altered for aluminum-alloy transducers.
See Strain Gage Installation Procedures for Transducers.

Reference: Instruction Bulletin B-130 for complete details.
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<table>
<thead>
<tr>
<th>PACKAGING</th>
<th>KIT</th>
<th>SINGLE MIX KIT</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>4 bottles (11 g ea) Curing Agent</td>
<td>1 bottle (11 g ea) Curing Agent</td>
</tr>
<tr>
<td></td>
<td>4 bottles (14 g ea) Resin</td>
<td>1 bottle (14 g ea) Resin</td>
</tr>
<tr>
<td></td>
<td>4 brush caps for dispensing mixed adhesive</td>
<td>1 brush cap for dispensing mixed adhesive</td>
</tr>
<tr>
<td></td>
<td>4 disposable mixing funnels</td>
<td>1 disposable mixing funnel</td>
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</table>

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