Epo-Weld™ HTE-5351

High Temperature, High Performance, Corrosion Resistant Epoxy System

PRODUCT DESCRIPTION
Incure Epo-Weld™ HTE-5351 is a two-part (1:1) epoxy system designed for bonding and potting applications operating at high temperatures. Bonds various substrates, it offers exceptional chemical resistance of submerged parts for up to 6 months in various acids, bases, salts, organic fluids and water. Tensile strength of 3,200 PSI and flexural strengths of up to 10,500 PSI is achievable on full cure. Incure HTE-5351 delivers outstanding performance on applications within the -65°C to 205°C (-85°F to 400°F) temperature range. Meets NASA outgassing requirements.

UNCURED PROPERTIES

<table>
<thead>
<tr>
<th>Chemical Type</th>
<th>Mix Ratio</th>
<th>1:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Viscosity, cp (rpm)</td>
<td>20,000 - 30,000</td>
<td></td>
</tr>
</tbody>
</table>

CURED PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>Hardness, Shore</th>
<th>D70 to D80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lineal Shrinkage</td>
<td>g/in</td>
<td>0.002</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Good</td>
<td></td>
</tr>
</tbody>
</table>

CURE SCHEDULE

<table>
<thead>
<tr>
<th>First Cure</th>
<th>Recommended Curing Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>2h @ 95°C</td>
<td>(2h @ 203°F)</td>
</tr>
</tbody>
</table>

CHEMICAL RESISTANCE TABLE (Not Applicable for this Product)

<table>
<thead>
<tr>
<th>ACIDS</th>
<th>SALTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH3COOH Acetic Acid, 5%</td>
<td>Softens</td>
</tr>
<tr>
<td>CH3COOH Acetic Acid, Bath</td>
<td>Destroyed</td>
</tr>
<tr>
<td>H2SO4 Chromic Acid, 10%</td>
<td>Dissolution</td>
</tr>
<tr>
<td>H2SO4 Citric Acid, 50%</td>
<td>No Effect</td>
</tr>
<tr>
<td>HCl Hydrochloric Acid, 50%</td>
<td>NaOH Sodium Hydroxide, 10%</td>
</tr>
<tr>
<td>HCl Hydrochloric Acid, 50%</td>
<td>NaOH Sodium Hydroxide, 50%</td>
</tr>
<tr>
<td>C3H6O3 Lactic Acid, 5%</td>
<td>Fuel Oil</td>
</tr>
<tr>
<td>HNO3 Nitric Acid, 10%</td>
<td>C8H18 Gasoline</td>
</tr>
<tr>
<td>HNO3 Nitric Acid, 10%</td>
<td>Hyraulic Oil</td>
</tr>
<tr>
<td>H3PO4 Phosphoric Acid, Concent</td>
<td>Jet Fuel</td>
</tr>
<tr>
<td>H2SO4 Sulphuric Acid, 10%</td>
<td>Mineral Spirits</td>
</tr>
<tr>
<td>H2SO4 Sulphuric Acid, 50%</td>
<td>Toulene</td>
</tr>
<tr>
<td>H2SO4 Sulphuric Acid, Concentra</td>
<td>Etched</td>
</tr>
</tbody>
</table>

APPLICATION PROCEDURES

For two part epoxy systems should be thoroughly mixed until it is uniform. High viscosity systems, pre-heat Part A and Part B separately to 35°C - 50°C (95°F to 122°F) to facilitate ease of mixing. Apply product using a spatula, putty knife or caulking gun. Apply to both surfaces and maintain 50ºC (95ºF to 122ºF) to facilitate ease of mixing. Apply product using a spatula, putty knife or caulking gun. Apply to both surfaces and maintain

SURFACE PREPARATION

All bonding surfaces must be free from contaminants such as grease, lose particles, oils, corrosive chemical stains etc. Rough or porous material such as metal castings should be baked at high temperature to burn off any embedded contaminants, especially trapped oils and chemicals. Smooth metal surfaces should ideally be abrasive blasted to 0.25mm (0.001") for optimum results.

STORAGE AND PREPARATION FOR USE

All Epo-Weld™ products should be stored in original containers (or replacement containers of similar material) in room temperature. Use a bigger container (twice the volume of the mixed contents) and leave mixed materials to settle (possibly some out-gassing) for 24hours.

NOTE

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