CC3-105

Unfilled, Low Viscosity, General Purpose Potting Resin

CC3-105 exhibits a wide variety of excellent features found only in the highest quality epoxy resins. It is a low viscosity, unfilled, resilient, transparent epoxy which can be cured at room temperature or with heat.

SUGGESTED APPLICATIONS:

Epoxy Glass Lamination: excellent wetting out properties
Thin Glue-Line Bonding: no bulky filler to occupy space
Void-Free, See Through Castings: low viscosity, air released rapidly

ELECTRICAL AND PHYSICAL PROPERTIES:

Specific Gravity at 25’ C: (uncatalyzed) 1.05
Viscosity cps at 25’ C: (uncatalyzed) 500 - 700
Thermal Conductivity: W/mK 0.2
Flexural Strength: psi 9,000
Izod Impact: ft lbs/in of notch 0.5
Water Absorption: %, 7 days @ 25’ C 0.13
Volume Resistivity @ 25’ C, ohm-cm $10^{13}$
Dielectric Strength, volts/mil 380
Bond Shear Strength: 1 in overlap 2,000
Service Temperature, ‘C continuous -55 to +150
Standard Color Clear

(Typical properties when cured with H-1 Hardener)

CHOICE OF HARDENERS:

H-1 Hardener: Rigid, good dimensional stability, fast cure.

H-18 Hardener: Resilient, excellent mechanical and thermal shock, low viscosity, good air release, fast cure.

H-10LV Hardener: Variable hardness, excellent impact properties, long pot life
CC3-105

<table>
<thead>
<tr>
<th>HARDENER</th>
<th>PARTS BY WEIGHT PER 100 PARTS OF RESIN</th>
<th>POT LIFE 100 GRAM 25°C (77°F)</th>
<th>CURE TIME 25°C (77°F)</th>
<th>CURE TIME 65°C (149°F)</th>
<th>CURE TIME 125°C (257°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1 Hardener</td>
<td>14</td>
<td>30 mins.</td>
<td>6 hrs.</td>
<td>30 mins.</td>
<td>15 mins.</td>
</tr>
<tr>
<td>H-18 Hardener</td>
<td>29.0</td>
<td>45 mins.</td>
<td>24 hrs.</td>
<td>2 hrs.</td>
<td>30 mins.</td>
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<tr>
<td>H-10LV Hardener</td>
<td>rigid</td>
<td>3 hrs.</td>
<td>24 hrs.</td>
<td>3 hrs.</td>
<td>- - -</td>
</tr>
<tr>
<td>H-10LV Hardener</td>
<td>semi-flex</td>
<td>3 hrs.</td>
<td>24 hrs.</td>
<td>3 hrs.</td>
<td>- - -</td>
</tr>
<tr>
<td>H-10LV Hardener</td>
<td>flexible</td>
<td>3 hrs.</td>
<td>24 hrs.</td>
<td>3 hrs.</td>
<td>- - -</td>
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</tbody>
</table>

ROOM TEMPERATURE CURE:

H-1 Hardener: Offers a working time of 30 minutes. Cures in 6 hours at 25°C or 30 minutes at 65°C. Produces a tough, rigid resin with good dimensional stability. Do not heat cure if the mass exceeds 100 grams.

H-18 Hardener: Offers a working time of 45 minutes. Cures in 24 hours at 25°C or 2 hours at 65°C. Produces a tough, resilient resin with good mechanical and thermal shock properties.

H-10LV Hardener: Offers a working time of 3 hours. Cures in 24 hours at 25°C or 3 hours at 65°C. Produces a variable hardness resin with excellent impact properties.

MIXING INSTRUCTIONS:

Weigh out the desired amount of resin in a clean container. Add the hardener accurately by weight in the proper proportion as specified above. (ie. 14 grams of H-1 Hardener and 100 grams of CC3-105 for a total mix of 114 grams) Mix thoroughly. Use in a well ventilated area and avoid contact with eyes and skin.

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