



## CC3-100

### Unfilled, Medium Viscosity, General Purpose Potting Resin

CC3-100 exhibits a wide variety of excellent features found only in the highest quality epoxy resins. It is a medium 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: | medium viscosity, air released rapidly |

#### ELECTRICAL AND PHYSICAL PROPERTIES:

|  |                  |
|--|------------------|
| Specific Gravity at 25° C: (uncatalyzed) | 1.1 – 1.2        |
| Viscosity cps at 25° C: (uncatalyzed)    | 11,000 – 15,000  |
| Thermal Conductivity: W/mK               | 0.2              |
| Flexural Strength: psi                   | 7,000            |
| Izod Impact: ft lbs/in of notch          | 0.5              |
| Water Absorption: %, 7 days @ 25° C      | 0.13             |
| Volume Resistivity @ 25° C, ohm-cm       | 10 <sup>13</sup> |
| 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-18 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                                  |



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| HARDENER        | PARTS BY WEIGHT<br>PER 100 PARTS OF RESIN |     | POT LIFE<br>100 GRAM<br>25°C (77°F) | CURE TIME       |                   |                      |
|-----------------|---|-----|-------------------------------------|-----------------|-------------------|----------------------|
|                 |   |     |                                     | 25' C<br>(77°F) | 65' C<br>(149' F) | 125 ' C<br>(257 ' F) |
| H-1 Hardener    | 14  |     | 30 mins.                            | 6 hrs.          | 30 mins.          | 15 mins.             |
| H-18 Hardener   | 29.0                                      |     | 45 mins.                            | 24 hrs.         | 2 hrs.            | 30 mins.             |
| H-10LV Hardener | rigid                                     | 33  | 3 hrs.                              | 24 hrs.         | 3 hrs.            | - - -                |
| H-10LV Hardener | semi-flex                                 | 83  | 3 hrs.                              | 24 hrs.         | 3 hrs.            | - - -                |
| H-10LV Hardener | flexible                                  | 133 | 3 hrs.                              | 24 hrs.         | 3 hrs.            | - - -                |

### 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 CC3-100 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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