

20-3005 CHEMICAL RESISTANT EPOXY SYSTEM

DESCRIPTION:

20-3005 is a two component chemical resistance epoxy system. It was developed for potting, coating, and adhesive applications requiring superior chemical resistance. It exhibits outstanding bonds to a variety of substrates and will cure at low temperatures.

20-3005 has a convenient 2:1 volumetric ratio and the hardener is pigmented white to help ensure thorough mixing. This system does not contain fillers and is therefore suitable for TriggerBond® packaging and meter mix and dispense equipment.

FEATURES:

- Excellent chemical resistance
- Excellent water resistance
- Excellent adhesion to metals & plastics
- DOT non-corrosive

TYPICAL SPECIFICATIONS:

| | |
|--------------------------------------|-----------------|
| Color | |
| Resin | Black |
| Hardener | White |
| Mixed | Dark Grey/Black |
| Viscosity, 25 °C, cps | |
| Resin | 20,000 |
| Hardener | 14,000 |
| Specific Gravity, 25 °C | |
| Resin | 1.17 |
| Hardener | 1.17 |
| Mix ratio by volume (Resin:Hardener) | 2:1 |
| Mix ratio by weight (Resin:Hardener) | 100:45 |
| Gel time, 100 grams, 25 °C | 90 minutes |
| Operating Temperature, °C | -50 to + 140 |
| Glass Transition Temp., °C | 50 |
| Tensile strength, psi | 7,600 |
| Tensile elongation, % | 3.2 |
| Hardness, shore D | 78 |
| Dielectric constant | 3.61 |
| Dissipation factor | 0.021 |

CHEMICAL RESISTANT DATA FOR 20-3005, % WEIGHT GAIN

3 days

| | |
|---------------------------|-------|
| Deionized water | 0.52 |
| Methanol | 7.16 |
| Ethanol | 2.41 |
| Toluene | 0.05 |
| Xylene | 0.02 |
| Butyl Cellosolve | 0.56 |
| Methyl Ethyl Ketone (MEK) | 17.17 |
| 10% Lactic Acid | 0.76 |
| 10% Acetic Acid | 1.70 |
| 70% Sulfuric Acid | 0.01 |
| 50% Sodium Hydroxide | 0.05 |
| 10% Sodium Hypochlorite | 0.49 |
| 1, 1, 1 Trichloroethane | 0.02 |

Samples cured for 7 days @ 25°C before testing.

INSTRUCTIONS FOR USE:

By volume mix two parts 20-3005R Epoxy to one part 20-3005C Hardener. (By weight mix ratio is 100:45).

Apply and cure according to one of the following schedules:

- | | | |
|----|-------------------|----------------|
| 1) | Below 25°C (77°F) | 24 – 48 hours |
| 2) | 25°C (77°F) | 24 hours |
| 3) | 30°C (86°F) | 3 ½ hours |
| 4) | 35°C (95°F) | 1 ½ hours |
| 5) | 45°C (113°F) | 20 minutes |
| 6) | 55°C (131°F) | 5 – 10 minutes |

IMPORTANT:

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