EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

40-3905
ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE AND COATING

DESCRIPTION:

40-3905 is an electrically conductive epoxy system designed for applications requiring low temperature cures. 40-3905 will cure at room temperature in 18-24 hours or can be accelerated with mild heat.

This is a solvent free epoxy system filled with pure silver. It has outstanding adhesion to plastics, aluminum, copper, magnesium, steel, bronze, nickel, kovar, ceramic, glass, phenolic, and printed circuit boards. 40-3905 can also be thinned with up to 10% Toluol for many coating applications.

FEATURES:

- Electrically conductive
- Thermally conductive
- Room temperature cure
- Good bond strength

TYPICAL SPECIFICATIONS:

Mix ratio, by weight (Resin:Catalyst)	100:5
Pot life, 100 gram mass @ 25°C	45 Minutes
Mixed viscosity	Thixotropic paste
Linear shrinkage, in/in	.003
Hardness, shore D	80-85
Specific gravity, 25°C	
Resin	2.98
Hardener	1.0
Tensile lapshear, psi (Al to Al)	1,200
Flexural strength, psi	10,900
Thermal conductivity, btu in/f^2/°F	60
Thermal expansion coefficient, per °C	$26x10^{-6}$
Operating temperature range, °C	$^{-}60$ to $^{+}120$
Volume resistivity, ohm-cm	$1.0x10^{-4}$

INSTRUCTIONS FOR USE:

1) All surfaces to be bonded or coated should be completely cleaned and grease free.

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2) By weight thoroughly mix 5 parts 40-3905 Catalyst to 100 parts 40-3905 Resin (pre-weighed kits eliminate the need to weigh components).
3) For coating applications thin with Toluol.
4) Cure according to one of the following cure Schedules:

A)	25℃	18-24 Hours
B)	65℃	2-3 Hours

AVAILABILITY:

40-3905 is available in bulk, pre-weighed kits, hinge packs, and pre-mixed & frozen.

STORAGE AND HANDLING:

40-3905 Resin and hardener should be stored at 25°C in original tightly sealed containers. Expected shelf life is twelve months in original unopened containers.

Filler settling is common with these products. Gently stir resin and hardener before using to make sure fillers are evenly dispersed.

IMPORTANT:

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