



32 Mechanic Avenue Unit 211 • Woonsocket RI 02895
Tel. 401-767-2269
Fax 401-767-2255
www.microsorbtech.com
E-mail: engineer@microsorbtech.com

**Product
Bulletin**

800-1105

E-SHIELD EC-1105

**ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE &
COATING SYSTEM**

GENERAL DESCRIPTION

E-SHIELD EC-11005 is an electrically conductive system designed for applications requiring low temperature cures.

E-SHIELD EC-1105 will cure at room temperature in 18 hours or can be accelerated with mild heat.

This is a solvent free epoxy system filled with pure silver. It has outstanding adhesion to aluminum, copper, magnesium, steel, bronze, nickel, kovar, ceramic, glass, phenolic, and printed circuit boards.

E-SHIELD EC-1105 can also be thinned with up to 10% Toluol for many coating applications.

E-SHIELD EC-1105 is available in two part kits and premixed and frozen.

TYPICAL SPECIFICATIONS:

Mix ratio, by weight (Resin:Catalyst)	100:5
Pot life, 100 gram mass @ 25°C:	60 Minutes
Linear shrinkage, in/in .:	0.003
Hardness, Shore D:	85
Specific gravity, 25°C:	2.80
Tensile strength, psi:	9,500
Compressive strength, psi:	14,000
Thermal Conductivity, btu in/f ² /°F:	105
Thermal expansion coefficient, per °C	26x10 ⁻⁶
Heat distortion, °C:	95
Operating temperature range, °C:	-50 to +165
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.
- 2) By weight thoroughly mix 5 parts 40-3905 Catalyst to 100 parts 40-3905 Resin.
- 3) For coating applications thin with Toluol.
- 4) Cure according to one of the following cure Schedules:

A) 25°C (77°F)	18 Hours
B) 65°C (149°F)	2-3 Hours

Warranty: This information is, to the best of Microsorb Technologies knowledge, accurate as of the date indicated. This information relates only to the specific materials designated herein and is not intended for the application or use of the materials with any other materials or in any process. The information is intended as a general guide only and does not constitute a warranty or representation whatsoever and MICROSORB TECHNOLOGIES HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES ARISING FROM THE USER'S RELIANCE ON OR USE OF THIS INFORMATION.

Rev 0 030408