

## EN 525 Black Epoxy Sealant

### Description

EN 525 is a one-part black adhesive based on epoxy resins. The cured Tg of over 120°C provides very good high temperature performance. It has excellent adhesion to most printed circuit boards and electronic components. It has a long pot life and long shelf life even at room temperature of 25°C. The thixotropy has been adjusted to control excessive overflow. The cure material has a smooth shiny surface.

### Applications

1. Encapsulation of ICs on printed circuit boards.
2. Encapsulation of smart card ICs.
3. Sealing of electronic and electrical devices.

### Guidelines for Use

1. Thaw the epoxy to room temperature (25 °C) before use.
2. Dispense the epoxy by using a syringe.
3. Wipe off any excess uncured adhesive with a piece of dry cloth or tissue. Further cleaning may be achieved with tissue dabbed with iso-propanol.
4. Cure the epoxy by heating for a minimum of 120 °C for 1 hour or 150 °C for 0.5 hour.

### Properties

Property	Test Method	Unit	Typical Value
Chemical type			Epoxy
Appearance	Pen 10		Black paste
Mix ratio, by weight			One component
Density	Pen 61		1.97
Shelf life, -20 °C	Pen 26	Month	12
Pot life, 25 °C	Pen 26	Day	7
Viscosity, CAP2000+,CAP-06, 100rpm, 25°C	Pen 44	Cps	30,820
Hardness, cured 120 °C /1 hr	Pen 29	Shore D	90
Water boil, wt gain, 1 hr	Pen 21	%	0.53
Tg, TMA, cured 120 °C /1 hr	Pen 19	°C	152
CTE before Tg	Pen 64	ppm/K	37
CTE after Tg	Pen 64	ppm/K	135
Storage Modulus 40°C	Pen 94	MPa	3,573
Loss Modulus 40°C	Pen 94	MPa	40
% of Weight Loss	Pen 92	%	<1

### Recommended Cure

Schedule	Temp.	Cure Time
A	120 °C	1 hr
B	150 °C	0.5 hr

### Storage

Tightly close original container of unused product. Store below -5 °C. Storing at lower temperatures down to -40 °C may prolong shelf life beyond 12 months. However it may take longer time to thaw the product.

### Packaging

- 30 ml EFD syringe
- 1 kg plastic jar
- 5 kg plastic pail

### Environment, Health & Safety

This product is RoHS compliant. It does not contain any known carcinogenic, mutagenic or teratogenic components.

### Contact Information

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