

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 isopropanol.
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	6
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 6 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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