

GL 174

Low Stress High Thixo Black Epoxy

Description

GL 174 is a one-part black adhesive based on epoxy resins. When fully cured the surface is glossy, bluish free and hard. Its flexibility makes the product suitable for use on flexible PCB. It has very good scratch and water resistance. This system has enhanced adhesion and wets glass, ceramics, most plastics and metals well. It has high thixotropic which can control the flow of the adhesive. It is specially developed for low stress bonding electronic parts, most plastics, and ceramics and metals.

Applications

One part black epoxy for electrical and electronic devices

Properties

Property	Test Method	Unit	Typical Value
Chemical type			Epoxy
Appearance	Pen 10		Black paste
Shelf life, -40 °C	Pen 26	Month	3
Pot life, 25 °C	Pen 57	Hour	2
Viscosity, Brookfield CAP 2000+ viscometer, 25 °C	Pen 44	cps	3500
Thixotropic Index	Pen 37		2
Hardness, cured 80°C for 3 hours	Pen 29	Shore D	85
Water boil, wt gain, 24 hr	Pen 21	%	0.95
Tg, DSC, cured 80°C for 3 hours	Pen 19	°C	60
Coefficient of thermal expansion, CTE before Tg CTE after Tg	ASTM D3386	ppm/K	70 180
Modulus of Elasticity,	ASTM D4065	MPa	740
% Of Moisture Absorption		%	1.16
Specific gravity			1.5

Guidelines for Use

1. Thaw the epoxy to room temperature (25 °C) before use.
2. The pot life is 1 hour. Processing the epoxy after the pot life may tend to trap bubbles.
3. Dispense the epoxy from the syringe.
4. The epoxy will harden in 24 hours at 25 °C. Full hardness will be achieved in 3 days. Faster curing can be achieved at elevated temperatures, eg. 80 °C for 3 hours.

Recommended Cure

Schedule	Temp.	Cure Time
A	25 °C	24 hr
B	80 °C	3 hours

Storage

Tightly close original syringe of unused product and store below -40 °C.

Packaging

- 3 ml EFD syringe
- 5 ml EFD syringe
- 10 ml EFD syringe

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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