TG-LH-FBPE-80
Flexible Black Potting Epoxy

Description

TG-LH-FBPE-80 is a two-part flexible black potting compound based on epoxy resins. When fully cured the surface is glossy, blush free and soft. It has very good scratch and water resistance. This system has enhanced adhesion, is of low viscosity and wets glass, ceramics, most plastics and metals well.

Applications

Flexible black potting epoxy for electrical and electronic devices.

Storage

Tightly close original container of unused product. Store in a cool and dark place.

Packaging

0.75 kg plastic bottle
1 kg plastic bottle
3 kg plastic bottle
5 kg plastic bottle
15 kg plastic bottle

Guidelines for Use

1. Gently shake Part A before use.
2. Mix Part A resin and Part B hardener in the ratio of 2.0 : 1.0 by weight.
3. The pot life is more than 60 minutes. Processing or pouring the mixed epoxy after 1 hour may tend to trap bubbles.
4. The epoxy may be poured over the object, spread with a brush, or dispensed with a syringe.
5. Blowing hot air over the surface of the epoxy can break any bubbles formed during mixing.
6. Wipe off any excess uncured epoxy with a piece of dry cloth or tissue. Further cleaning may be achieved with tissue wetted with iso-propanol (IPA).
7. The epoxy will harden in 12 hours. Full hardness will be achieved in 1 day. Faster curing can be achieved at elevated temperatures, eg. 80° C for 2 hours

Environment, Health & Safety

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

Properties

Property	TG-LH-FBPE-80			Unit
	Part A Resin	Part B Hardener	Mixed	
Chemical type	Epoxy	Amine	-	-
Appearance	Black liquid	Clear yellowish liquid	-	-
Mix ratio, by weight	2.0	1.0	-	-
Shelf life, 25°C	12	12	-	Month
Pot life, 25 °C	-	-	6	Hour
Viscosity, CAP2000+ viscometer, 25°C	22,200	140	3,200	cP
Hardness, cured 25°C for 7 days	-	-	80	Shore A
Water boil, wt gain, 24 hr	-	-	1.0	%
Ionic Content, Cl	-	-	>500	ppm
, K	-	-	Non detected	ppm
, Na	-	-	Non detected	ppm
Thermal conductivity	-	-	1.1	$Wm^{-1}K^{-1}$
Electrical resistivity	-	-	10^{16}	ohm.cm
Filler type	Metal oxide	-	-	-

Recommended Cure

Alternative cure	Temp. (°C)	Cure time
A	25	24 hrs
B	80	2 hrs