

Epoxy Resin

EGPE500GF



Description

EGPE500GF is a general purpose encapsulating compound. The flame retardant technology used is of a 'clean' type leading to relatively low toxicity fumes and low smoke emission.

Features

- General purpose black epoxy resin
- Cost effective
- Max operating temperature 120°C
- Flame retardant

Technical Properties

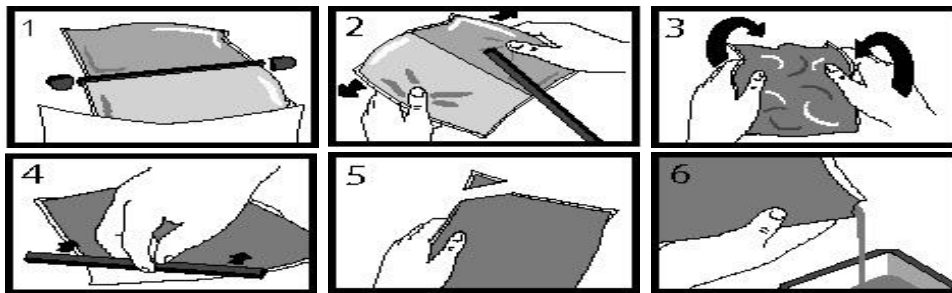
Typical Properties:

Liquid Properties:	Base Material	Epoxy
	Density Part A - Resin (g/ml)	1.82
	Density Part B - Hardener (g/ml)	0.92
	Part A Viscosity (mPa @ 23°C)	150000
	Part B Viscosity (mPa @ 23°C)	200
	Mixed System Viscosity (mPa @ 23°C)	9000
	Mix Ratio (Weight)	11.00:1
	Mix Ratio (Volume)	5.36:1
	Usable Life (20°C)	60 mins
	Gel Time (23°C)	150 mins
	Cure Time (23°C)	24 hours
	Cure Time (60 °C)	2 hours
	Colour Part A - Resin	Black
	Colour Part B - Hardener	Straw
	Storage Conditions	Dry Conditions: Above 15°C, Below 30°C
	Shelf Life	18 months
	Shrinkage	< 1%
Cured System:	Thermal Conductivity (W/mK)	0.35
	Cured Density (g/ml)	1.68
	Temperature Range (°C)	-40 to +120
	Dielectric Strength (kV/mm)	10
	Volume Resistivity (ohm-cm)	10 ¹⁴
	Shore Hardness	D85
	Colour (Mixed System)	Black
	Flame Retardency	Yes
	Tensile Strength (MPa)	50

Mixing Procedures

Resin Packs:

When in Resin pack form, the resin and hardener are mixed by removing the clip and moving the contents around inside the pack until thoroughly mixed. To remove the clip, remove both end caps, grip each end of the pack and pull apart gently. By using the removed clip, take special care to push unmixed material from the corners of the pack. Mixing normally takes from two to four minutes depending on the skill of the operator and the size of the pack. Both the resin and hardener are evacuated prior to packing so the system is ready for use immediately after mixing. The corner may be cut from the pack so that it may be used as a simple dispenser.



Additional Information

Curing Schedule

Do not heat cure large volumes immediately. Allow these to gel at room temperature and post-cure at high temperature if required (refer to liquid properties for details). Small volumes (250ml) may be heat cured immediately.

Storage

When storing under very cold conditions, the hardener may crystallise. If this occurs, simply warm (40°C) the container gently until all crystals have re-melted.