Encapsulation Resins

Technical Data Sheet



PROVISIONAL TDS

ER6010 X-Ray Shielding Epoxy Resin

ER6010 x-ray shielding resin is a two-part, epoxy encapsulation resin which has primarily been developed for the encapsulation of mission critical applications where protecting the design is crucial.

- After encapsulating the circuit, when x-rayed the circuit components and design cannot be seen
- Good flow characteristics to allow the potting of difficult and complex geometries
- Good thermal conductivity; assists with dissipating heat out of the unit
- Wide operating temperature range; good high temperature resistance

Typical Properties

Liquid Properties: Base Material **Epoxy** Density Part A - Resin (g/ml) 2.34

Density Part B - Hardener (g/ml) 0.99

Part A Viscosity (mPa s @ 23ºC) 10000-15000 Part B Viscosity (mPa s @ 23ºC) 1500-3000 Mixed System Viscosity (mPa s @ 23°C) 2000-3000 Mix Ratio (Weight) 9.00:1 Mix Ratio (Volume) 3.88:1 Usable Life (20°C) 60 mins Gel Time (23°C) 150 mins Cure Time (23°C) 24 hours Cure Time (60°C) 3 hours Cure Time (80°C) 1 hour Cure Time (100°C) 30 mins Colour Part A - Resin Beige Colour Part B - Hardener

Storage Conditions Dry Conditions: Above 15°C, Below 35°C

Brown

Shelf Life 12 months Shrinkage <1%

All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification.

Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

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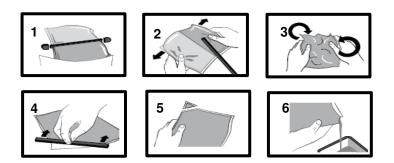




Mixing Procedures

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.



General

Sedimentation of the resin has been minimised by careful attention to the formulation. However, any sediment which may have occurred over long periods of time must be dispersed before removing any material from the container. This dispersion can be carried out (if necessary) by stirring with a broad bladed spatula or gently rolling the can. Take care not to introduce excessive amounts of air during this operation or it may be necessary to reevacuate the resin. Sedimentation will be accelerated by storage at high temperatures. Sedimentation found in resin packs forms no problem since the sediment is re-mixed when the pack is used.

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Additional Information

Cleaning: It is far easier for machines & containers to be cleaned before the resin has been allowed

to cure. Electrolube's RRS is suitable for cleaning machines and containers and cured resin

may be slowly softened and removed by soaking in our RRS.

Curing: 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 cold conditions (<15°C), the resin may crystallise. If this occurs, simply

warm (40°C) the container gently until all crystals have re-melted.

Health & Safety: Always refer to the Health & Safety data sheet before use. These can be downloaded

from www.electrolube.com

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