

## Technical Data Sheet

### **ER6007** **Modified Silicone resin**

ER6007 is a two-part Repairable Modified Silicone potting and encapsulating resin designed for the protection of electronic devices. It has excellent high temperature properties, suitable for use in applications where the operating temperature will be up to 180°C

- Good flow characteristics to allow the potting of difficult and complex geometries
- Simple 1:1 mix ratio, for ease of processing
- Wide temperature range ideal for applications requiring high temperature resistance
- Good chemical & water resistance

#### Typical Properties

Liquid Properties:	Base Material	SILICONE
	Density Part A - Resin (g/ml)	1.53
	Density Part B - Hardener (g/ml)	1.48
	Part A Viscosity (mPa s @ 23°C)	2500 - 3500
	Part B Viscosity (mPa s @ 23°C)	4000 - 6000
	Mixed System Viscosity (mPa s @ 23°C)	3200 - 4800
	Mix Ratio (Weight)	1.00 : 1
	Mix Ratio (Volume)	0.98 : 1
	Usable Life (23°C)	40 mins
	Gel Time (23°C)	150 mins
	Cure Time (23°C)	24 hours
	Cure Time (60°C)	4 hours
	Cure Time (80°C)	2 hour
	Cure Time (100°C)	45 Min
	Colour Part A - Resin	Black
	Colour Part B - Hardener	Beige
	Storage Conditions	Dry Conditions: Above 15°C, Below 30°C
	Shelf Life	12 months

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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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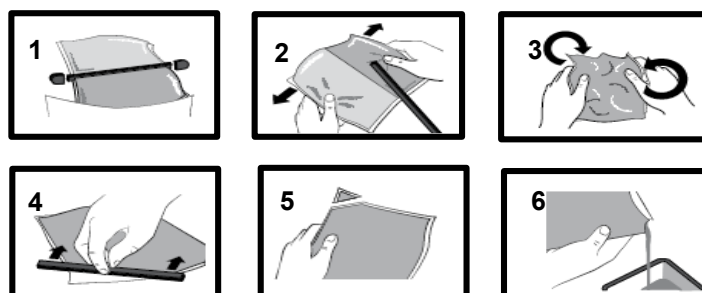
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Cured System:	Cured Density (g/ml)	1.50
	Temperature Range (°C)	-60 to +160
	Max Temperature (Short Term (°C)/30 mins) (Application and Geometry Dependent)	180°C
	Colour (Mixed System)	Black
	Hardness (23°C)	A60
	Dielectric Strength (kV/mm)	12
	Volume Resistivity (ohm-cm)	10 <sup>14</sup>
	Thermal Conductivity (W/m.K)	0.66

## **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.



### **Bulk Mixing**

When mixing, care must be taken to avoid the introduction of excessive amounts of air. Automatic mixing equipment is available which will not only mix both the resin and hardener accurately in the correct ratio but do this without introducing air. Containers of Part A (Resin) and Part B (Hardener) should be kept sealed at all times when not in use to prevent the ingress of moisture. Bulk material must be thoroughly mixed before use. Incomplete mixing will result in erratic or partial curing.

### **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 re-evacuate 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.

### **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.

**Health & Safety:** Always refer to the Health & Safety data sheet before use. These can be downloaded from [www.electrolube.com](http://www.electrolube.com)

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