

## SC2006 Silicone Resin

### Product Description

SC2006 is a two parts, silicone potting and encapsulating compound designed for the protection of electrical devices. It has good thermal conductive and exceptional high temperature properties, suitable for use in applications where the operating temperature will be up to 200°C. It is particularly suitable for use in automated mixing and dispensing equipment.

### Features

- Extremely soft and flexible
- Good thermal conductive
- Flame retardant meet UL94 V-0
- A 1:1 ratio for ease of processing
- Wide temperature range

<b><u>Approvals:</u></b>	<b>RoHS Compliant</b>	<b>Yes</b>
	<b>UL 94 V-0</b>	<b>Meets approval</b>

### Typical Properties:

Liquid Properties:

Base Material	Silicone
Part A Viscosity (mPa s @ 23°C)	15000
Part B Viscosity (mPa s @ 23°C)	10000
Mix Ratio (Weight)	1:1
Mix Ratio (Volume)	1:1
Mixed System Viscosity (mPa s @ 23°C)	15000
Mixed density (g/ml)	2.23
Gel Time (23°C)	40 min
Cure Time (23 °C)	4-16 hours
Cure Time (70 °C)	<30 min
Colour Part A - Resin	Gray
Colour Part B - Hardener	White

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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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BS EN ISO 9001:2008  
Certificate No. FM 32082

**Cured System:**

Thermal Conductivity (W/m.K)	1.0-2.0
Cured Density (g/ml)	2.23
Hardness	Shore A10/ Shore OO 60
Tensile strength (MPa)	0.7
10% stretch modulus (MPa)	0.4
Break point elongation (%)	300
Volume resistivity (ohm-cm)	$5.7 \times 10^{14}$
Dielectric constant	2.9
Dielectric loss angle tangent	$1.4 \times 10^{-3}$
Dielectric Strength (kV/mm)	16
Flame retardancy	UL94 V0

## **Mixing Procedures**

### **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. Incomplete mixing will result in erratic or partial curing.

### **General**

Sedimentation of the resin may occur due to the low viscosity. This must be dispersed before removing any material from the container 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**

All surfaces must be clean before resin is applied. Certain materials, chemicals, curing agents and plasticizers can inhibit the cure of silicone encapsulants. Most notable of these include:

- Organotin and other organometallic compounds
- Silicone rubber containing organotin catalyst

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- Sulphur, polysulphides, polysulphones or other sulphur containing materials
- Amines, urethanes or amine-containing materials
- Unsaturated hydrocarbon plasticisers
- Some solder flux residues

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