# **Polyurethane Resin**



## **Description**

RoHS Compliant

MC002234 is a two-part, general purpose polyurethane designed for potting and encapsulating. MC002234 has excellent adhesion to a wide variety of substrates.

### **Typical Properties**

#### **Liquid Properties**

Base Material : Polyurethane

Density Part A - Resin : 1.62 g/ml

Density Part B - Hardener : 1.21 g/ml

Part A Viscosity : 20000 mPa s @ 23°C
Part B Viscosity : 50 mPa s @ 23°C
Mixed System Viscosity : 2000mPa s @ 23°C

Mix Ratio (Weight) : 5.21:1 Mix Ratio (Volume) : 3.88:1 Usable Life (20°C) : 40 mins Gel Time (23°C) : 90 mins Cure Time (23°C) : 24 hours Cure Time (60°C) : 3 hours Colour Part A - Resin : Black Colour Part B - Hardener : Brown Shrinkage : < 1%

Exotherm (Measured on 100ml sample

in a cylinder of diameter 49.4mm @ 23°C) : < 35°C

### **Cured System**

Thermal Conductivity : 0.4W/m.K

Cured Density : 1.54g/ml

Temperature Range : -40°C to +130°C

Weight Loss after 600 Hours @ 155°C : 7% Dielectric Strength : 18kV/mm : 10<sup>14</sup>Ω-cm Volume Resistivity Shore Hardness (@ 23°C) : A75/D25 Colour (Mixed System) : Black Flame Retardancy : Yes Permittivity @ 50 Hz : 4.9 Comparative Tracking Index : >600 Volts

Water Absorption (9.7mm thick disk, 51mm diameter)

10 days @ 20°C/1 hour @ 100°C : <0.5%/<1%

## **General Properties**

Packaging : 250g Resin Pack
Shelf Life : 12 months

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

UL Approval : UL94 V-0





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## **Mixing Procedures**

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.

## **Part Number Table**

Description	Part Number
Polyurethane Resin, General Purpose, Black, 250g, Pack	MC002234

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