



TECHNICAL DATA SHEET

**RS 552-668
Epoxy Resin**

RS 552-668 is a flame retardant, thermally conductive, two part potting and encapsulating compound. The flame retardant technology used is of a 'clean' type leading to relatively low toxicity fumes and low smoke emission.

- Excellent thermal conductivity and excellent electrical properties
- Meets UL94 V-0 approval
- Low shrinkage and exotherm
- Non-toxic and free of abrasive fillers; low wear on dispensing machinery

Approvals **RoHS-2 Compliant (2011/65/EU):** **Yes**

Typical Properties

Liquid Properties:	Density Part A - Resin (g/ml)	2.25
	Density Part B - Hardener (g/ml)	0.94
	Part A Viscosity (mPa s 23°C)	200000
	Part B Viscosity (mPa s 23°C)	58
	Mixed System Viscosity (mPa s 23°C)	16700
	Mix Ratio (Weight)	17.31:1
	Mix Ratio (Volume)	7.23:1
	Usable Life (20°C)	90 mins
	Gel Time (23°C)	5 hours
	Cure Time (23 °C)	24 hours
	Cure Time (60 °C)	4 hours
	Storage Conditions	Dry Conditions: Above 15°C, Below 30°C

Cured System:	Thermal Conductivity (W/m.K)	1.26
	Cured Density (g/ml)	2.11
	Temperature Range (°C)	-40 to +125
	Dielectric Strength (kV/mm)	10
	Volume Resistivity (ohm-cm)	10 ¹⁵
	Shore Hardness	D80
	Colour (Mixed System)	White
	Flame Retardancy	Meets UL94 V-0
	Tensile Strength (MPa)	82
	Deflection Temperature (°C)	60
	Coefficient of Expansion (ppm/°C)	30
	Loss Tangent @ 50 Hz	0.05
	Permittivity @ 50 Hz	6.00

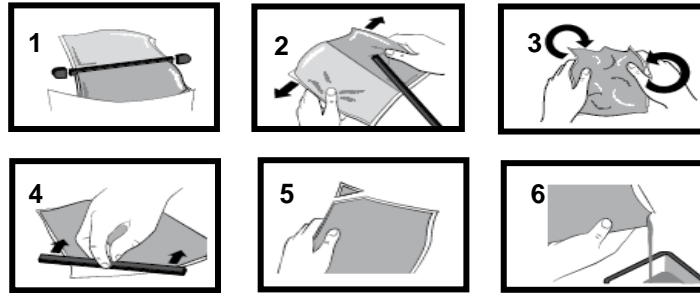


Packaging
250g Resin Pack

Order Code
RS552-668

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:** 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.
- Health & Safety:** Always refer to the Health & Safety data sheet before use.