

IRS 3078 Polyurethane Potting Compound



Description

IRS 3078 Polyurethane Potting Compound is a semi-rigid, room temperature curing and electrically insulating black polyurethane potting compound.

The material is low viscosity, flowable and available in convenient side-by-side double syringe cartridges. It offers high adhesion and impact resistance, with a resilient Shore D 65 hardness.

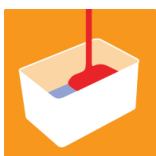
IRS 3078 may be used as a low viscosity adhesive.

Key Properties

- Flowable, semi-thixotropic
- High impact resistance
- Good electrical insulation properties
- Room temperature curing
- High adhesion
- Packaged in convenient side-by-side cartridges

Typical Properties

Property	
Mix ratio	0.90:1 resin to hardener by weight 1:1 resin to hardener by volume
Mixed viscosity	2,000 cps
Specific gravity (mixed)	1.10
Hardness, Shore D	65
Operating temperature	-40 to +130°C
Thermal conductivity	> 0.2 W/mK
Comparative tracking index	>600 V
Electric strength	64 MN/m ²
Volume resistivity	1.6 x 9 ¹² ohm.cm
Surface resistivity	6.9x10 ¹⁵ Ω
Peak exotherm	65°C
Impact strength	8.33 KJ/m ²
Max elongation	23.5%
Permittivity	3.25 KHz



Contact us for more information about our potting compounds

t 01865 842842

e info@intertronics.co.uk

www.intertronics.co.uk

intertronics

Station Field Industrial Estate
Banbury Road, Kidlington
Oxfordshire, England OX5 1JD

Cure Schedule

Bondline Temperature	Working Life	Full Cure
10°C		24 hours
RT (20-25°C)	6 minutes	12 hours
80°C		6 hours

Cure time will depend on cross sectional area, ambient conditions, and mixing method. The above data is given as a guide only. Hotter temperatures may be used for faster cure but will result in higher post cure shrinkage and higher cure exotherm. Experimentation and testing is suggested to avoid side effects.

Lap Shear Adhesion

Substrate	
Aluminium to Aluminium	14 Kg/cm ²
Stainless Steel to Stainless Steel	12 Kg/cm ²

Storage and Shelf Life

12 months at 25 +/- 10 °C

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). Products in this state will not usually cure to normal and expected properties. In extreme cases it may appear solid and cured. Fluctuating temperatures (within 5 to 50 °C) aggravate this phenomenon. Heating the individual component to 50 to 60 °C while stirring can usually restore products to original state.

Health and Safety

Epoxy resin systems may cause sensitisation by skin contact or inhalation may be corrosive, harmful or toxic. It is therefore strongly recommended that skin and eye contact is avoided by the using of appropriate personal protective equipment such as gloves, safety glasses or goggles and overalls.

Wash any contamination from the skin immediately and thoroughly and do not eat, smoke or drink in the working vicinity. Under normal working conditions a good source of ventilation is adequate, however if the material is heated, or where vapour levels are likely to exceed the occupational exposure limits appropriate respiratory protection must be worn.

Local exhaust ventilation (LEV) may be required especially for curing ovens or where large volumes of material are curing.

The above is given as a guide only; please refer to IRS3078 safety data sheet individual/specific advice.

Useful Resources

[Product webpage](#)

Warranty

Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warranties expressed or implied. The user shall determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith.