

IRS 2040 Epoxy Potting Compound, Flame Retardant Encapsulating Compound



Description

IRS 2040 Epoxy Potting Compound is a non-toxic general purpose flame retardant encapsulating compound. It has a long pot life and can be cured at ambient temperatures or accelerated with heat. When cured, IRS 2040 exhibits good surface finish, high electrical strength, good thermal conductivity, low exotherm and low cure shrinkage. It has a semi-flexible nature which allows thermal expansion without cured stress, making it compatible with most pcb components and materials over a wide range of temperatures. In addition to this it has excellent adhesion to most plastic and metal substrates. IRS 2040 is suitable for a wide variety of applications due to its combination of properties and ease of use. It does not contain halogens or heavy metals and comes in a standard colour of black.

Features & Benefits

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- High electrical insulating characteristics
- Non-toxic
- Good thermal conductivity
- Low shrinkage
- High adhesion
- Flame retardant to UL94-V0 @ 3mm
- Good chemical and water resistance
- Meets the requirements of WEEE and RoHS
- Long pot life
- Cured at room temperature or with heat

Specifications

	Resin	Hardener	Mixed
Colour	Black	Amber	Black
Specific gravity (g/ml)	1.8	1.0	1.7
Viscosity m.Pa.s @ 25°C	60 000	350	15 000

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Mix ratio	8.6:1 resin to hardener (weight) 4.8:1 resin to hardener (volume)		
Pot life	120 minutes (150g @ 25°C)		
Gel time	360 minutes (150g @ 25°C)		
Cure schedule	Minimum cure: 24 hrs @ 20°C 2 hrs @ 60°C 1 hr @ 80°C	Full cure: 1 week 4 hours 2 hours	
Operating temperature range	-55 to + 130°C		
Flammability	UL94-V0 @ 3mm		
Shore hardness	D80		
Shrinkage (volume)	0.3%		
Tensile strength	50 mPa		
Compressive strength	60 mPa		
Thermal conductivity	0.85 W/mK		

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Elongation at break	2-5%
Coefficient of thermal expansion	35-55 ppm/°C
Volume resistivity	11 x E10 ohm-cm
Dielectric strength	18 kV/mm
Relative permittivity	4.8 @50Hz
Water absorption	0.3% (30 days @ 20°C)

Ordering Information

IRS 2040 is available in twinpacks or in bulk.

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The twinpack sachet is a clear film sachet, with the resin and hardener separated by a removable clip and rail divider. [Click here for twinpack mixing instructions.](#)

In kit form, resin and hardener are provided in separate containers to the correct ratio. In most cases pour the hardener into the larger resin container and use it as a mixing vessel. Stir well using appropriate mixer until homogeneous.

Part number	Description
IRS2040-1000G	Epoxy potting compound – 1000 gram twinpack

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Part number	Description
IRS2040-5KG	Epoxy potting compound – 5kg bulk kit

For best results, store away from strong oxidising agents, strong acids and strong bases. Store in a cool, well-ventilated area. Keep container tightly closed. Keep in original packaging.

Supplied by:



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