

IRS 2040-1 Epoxy Potting Compound, Flame Retardant Encapsulating Compound



Description

Also available to buy online at [!\[\]\(666e09182d4cd268646ea700ea60dcdf_img.jpg\)](#)
SHOP 

IRS 2040-1 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 2040-1 exhibits good surface finish, high electrical strength, good thermal conductivity, low exotherm and low cure shrinkage. It is 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 2040-1 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

- High electrical insulating characteristics

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- Non-toxic
- Good thermal conductivity
- Low shrinkage
- High adhesion
- Flame retardant to UL94 V-0 @ 3mm
- Good chemical and water resistance
- Meets the requirements of WEEE and RoHS
- Long pot life
- Cured at room temperature or with heat

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Specifications

Part number change: As of Version 3.0, May 2020, the part number of this product changed from IRS2040 to IRS2040-1. This is due to an unavoidable change in a formulation component. The new formulation has some different properties, and we recommend that you re-evaluate this product if you were using an earlier version.

Typical properties	Mixed	Resin	Hardener
Colour	Black	Black	Amber
Specific gravity (g/ml)	1.70	1.87	1.05
Viscosity m.Pa.s @ 25°C	6,500	70,000	400
Mix ratio	8.5:1 resin to hardener (weight) 4.8:1 resin to hardener (volume)		
Pot life	40-80 minutes (150g @ 25°C)		

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Typical properties	Mixed	Resin	Hardener
Gel time	180 minutes (150g @ 25°C)		
Cure schedule	Minimum cure: 24 hrs @ 20°C 2 hrs @ 60°C 1 hr @ 80°C Full cure: 48 hrs @ 20°C 4 hrs @ 60°C 2 hrs @ 80°C		
Operating temperature range	-55 to + 130°C		
Flammability	UL94 V-0 @ 3mm		
Shore hardness	D80-D90		
Shrinkage (volume)	0.3%		
Tensile strength	14 mPa		
Compressive strength	60 mPa		

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Typical properties	Mixed	Resin	Hardener
Deflection temperature	35°C		
Thermal conductivity	0.85 W/mK		
Elongation at break	0.7%		
Loss tangent	0.060 @50Hz		
Coefficient of thermal expansion	35-55 ppm/°C		
Impact strength	310 KJ/m ²		
Electric strength	18 kV/mm		
Relative permittivity	4.8 @50Hz		
Flexural strength	31.3 MPa		
Flexural modulus	2.08 GPa		
Water absorption	0.3% (30 days @ 20°C)		

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Safety Data Sheets

For the latest SDS for this product, please e-mail msds@intertronics.co.uk

Other Information

See how these customers got results from IRS 2040-1 for electronics potting applications in these [Case Studies](#):

Application Insight
**ELECTRONICS
ASSEMBLY POTTING**
Potting of electronic modules
for in vehicle use
IRS 2040-1



[Application Insight – Electronics Assembly Potting](#)

Potting electronic modules for vehicles using IRS 2040-1.

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Application Insight – Industrial Switch Potting

Potting of mass-produced switches regularly used in the oil and gas industries, manufacturing, mining, marine and many other extreme environments using IRS 2040-1.



Application Insight – LED Power Supply Potting

Potting of electronic components and power supply of specialist LED displays using IRS 2040-1.

Ordering Information

IRS 2040-1 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
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Compound



<div>IRS2040-1-1000G</div> <div><div>SHOP </div></div>	<div>Epoxy potting compound, flame retardant, black</div> <div>– 1kg twinpack</div>
<div>IRS2040-1-5KG</div> <div><div>SHOP </div></div>	<div>Epoxy potting compound, flame retardant, black</div> <div>– 5kg kit</div>

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.

Let’s start by talking about your application

IRS 2040-1 Epoxy Potting Compound, Flame Retardant Encapsulating Compound



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orders@intertronics.co.uk

- Name*
- Company*
- Phone*
- Email*
- Post code*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.

-
- Tell us about your application

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