5 Minute[®] Epoxy

ORDERING INFORMATION

Stock No.	Package Size
14251	25ml Dev-tube
14210	70g Twin-tube
14270	50ml Cartridge
14272	400ml Cartridge
	1

Description

A rapid-curing, general-purpose adhesive / encapsulant. It forms a hard, rigid bond or coating in minutes

Features

- 100% reactive, no solventsGood dielectric strength
- Good solvent resistance

Intended Use

- Cures fast for quick metal to metal bonding and repairs
- Pots and encapsulates electronic components and assemblies
- Suitable for bonding metals, fabrics, ceramics, glass, wood and concrete (in combinations)

PRODUCT DATA

Physical
Properties
(Uncured)

Colour Light Amber
Mixed Viscosity 10,000cps

Mixed Ratio by Volume & Weight 1:1

Working time 28 grams @ 23_C 3 - 6 minutes
Fixture time 10-15 minutes
Functional cure @ 23_C 45 - 60 minutes
Full Cure 12 hours
Mixed Density 1.10 gm/cc

Performance characteristics (cured)

7 days cured at 24°C

Adhesive tensile shear ASTM D1002
T Peel
Service temperature, dry
Tensile Elongation
Specific Volume
Solids by volume
Cured hardness, ASTM D2240

13 MPa
4-5 N/10mm
-40 - 93_C
17 99 cm³/kg
909 cm³/kg

Dielectric strength, ASTM D149 19.6 KV/mm

Chemical Resistance

7 days room temperature cure (30 days immersion)

Acetic (dilute)10% Poor Acetone Poor Ammonia Poor Corn Oil Excellent Cutting oil Excellent Ethanol Poor Petrol (unleaded) Excellent Glycols/Antifreeze Fair Hydrochloric 10% Isopropanol Poor Poor MEK Kerosene Excellent Poor Mineral Spirits Excellent Motor Oil Excellent Sodium Hydroxide Poor Sulphuric 10% Poor

10%

Please consult Biga Group for other chemicals



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APPLICATION INFORMATION

Surface Preparation

5 Minute Epoxy works best on clean surfaces. Surfaces should be free of heavy deposits of grease, oil, dirt or other contaminants, or cleaned with industrial cleaning equipment such as vapour phase degreasers or hot aqueous baths. Abrading or roughing the surfaces of metals will increase the microscopic bond area significantly and optimise the bond strength.

Mixing

This product is available in cartridges, and 28g Devtube form.

Cartridge Form: The cartridge should be used with the appropriate manual Applicator Gun and Static Mixer Nozzle. The Static Mixer Nozzle enables the material to be thoroughly mixed when dispensed, and thus can be applied directly to the surfaces to be bonded. Please note: Once the product goes beyond its working time the nozzle has to be thrown away and a new nozzle used for further dispensing.

Where only small amounts are required the 28g Devtube, which comes with its own plunger to extrude the two components at an equal rate can be used. Material must then be manually mixed before application.

Application

Apply mixed epoxy directly to one surface in an even film or as a bead. Assemble with the mating part within the recommended working time. Obtain firm contact between the parts to minimize any gap and ensure good contact of the epoxy between the mating parts, clamping may optimize this part of the process. A small volume of epoxy should flow out the edges to show there is adequate gap filling. For very large gaps, apply epoxy to both surfaces and spread to cover the entire area, or make a bead pattern, which will allow flow throughout the joint.

Let bonded assemblies stand for the recommended functional cure time before handling. They are capable of withstanding processing forces at this point, but should not be dropped, shocked or heavily loaded.

Storage Shelf Life

Devcon Epoxy Adhesives should be stored in a cool, dry place when not used for a long period of time. A shelf life of 3 years from date of manufacture can be expected when stored at room temperature 22°C in their original containers. The expiry will be displayed on the product packaging.

Precaution

For complete safety and handling information please refer to the appropriate Materials Safety Data Sheets prior to using this product.

Warranty

Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

Disclaimer

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

For product information visit www.bigagroup.com / www.devconeurope.com alternatively for technical assistance please call +385 52 880 882 or send an e-mail to biga@biga.hr.

