



TECHNICAL DATA SHEET – 5 MINUTE EPOXY A RAPID-CURING, GENERAL-PURPOSE ADHESIVE / ENCAPSULANT

Revised: 05/2018

ORDERING INFORMATION

STOCK NO.: 14251

PACKAGE SIZE: 25ml Dev-tube

STOCK NO.: 14210

PACKAGE SIZE: 70g Twin-tube

STOCK NO.: 14270

PACKAGE SIZE: 50ml Cartridge

STOCK NO.: 14272

PACKAGE SIZE: 400ml Cartridge

DESCRIPTION

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

FEATURES

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

RECOMMENDED APPLICATIONS

- 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

PHYSICAL PROPERTIES (CURED) - 7 DAYS CURED AT 24°C

ADHESIVE TENSILE SHEAR ASTM D1002	13 MPa
T PEEL	4-5 N/10mm
SERVICE TEMPERATURE, DRY	-40 - 93°C
TENSILE ELONGATION	1%
SPECIFIC VOLUME	909 cm ³ /kg
% SOLIDS BY VOLUME	100
CURED HARDNESS, ASTM D2240	85D
DIELECTRIC STRENGTH, ASTM D149	19.6 KV/mm

CHEMICAL RESISTANCE - 7 DAYS ROOM TEMPERATURE CURE (30 DAYS IMMERSION)

	POOR	FAIR	VERY GOOD	EXCELLENT
ACETIC (DILUTE) 10%	•			
AMMONIA	•			
CUTTING OIL				•
PETROL (UNLEADED)				•
HYDROCHLORIC 10%	•			
KEROSENE				•
MINERAL SPIRITS				•
SODIUM HYDROXIDE 10%	•			
ACETONE	•			
CORN OIL				•
ETHANOL	•			
GLYCOLS/ANTIFREEZE		•		
ISOPROPANOL	•			
MEK	•			
MOTOR OIL				•
SULPHURIC 10%	•			

Please consult Devcon for other chemicals.

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. Devcon makes no representations or warranties of any kind concerning this data.

For product information visit www.devconeurope.com alternatively for technical assistance please call +353 61 771 500.