



Brunel Close, Park Farm
Wellingborough
Northants
NN8 6QX
01933 675299
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5 MINUTE EPOXY

PRODUCT DATA SHEET

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

FEATURES

- 7 Minute fixture time
- 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
- Seals against dust, dirt and contamination
- Fast-curing, thin set, bonding above 4°C
- Suitable for bonding metals, fabrics, ceramics, glass, wood and concrete (in combinations)

PRODUCT DATA

Physical Properties - (uncured)

Colour.....	Clear
Mix Ratio by volume.....	1:1
Mixed Viscosity.....	8,000 - 10,000 cps
Working time 28 Grams 24°C.....	4 minutes
Functional cure @ 25°C.....	45 minutes
Coverage (cm ² @0.005mm thickness).....	33.5
Specific Volume.....	833cm ³ /kg
% Solids by volume.....	100

Performance Characteristics -(7 days cured @ 24°C)

Adhesive tensile shear ASTM D1002.....	9.7N/mm ²
Operating temperature, dry.....	-40°C - 93°C
Cured density ASTM D792.....	1.10gm/cm ³
Cured hardness ASTM D2240.....	85D
Dielectric strength ASTM D149 (Volts.mil).....	490 volts/mil

Chemical Resistance: 7 days room temperature cure (30 days immersion @ 24°C)

Kerosene	Very Good	Methanol	Fair
Hydrochloric Acid	Very Good	Toluene	Very Good
Chlorinated solvent	Fair	Ammonia	Very Good
10% Sulphuric Acid	Very Good	10% Sodium Hydroxide	Very Good

Please consult ITW Devcon for other chemicals.



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Epoxies are very good in water, saturated salt solution, leaded gasoline, mineral spirits, ASTM#3 oil and propylene glycol. Epoxies are generally not recommended for long-term exposure to concentrated acids and organic solvents.

APPLICATION INFORMATION

Surface preparation:

5 Minute Epoxy works best on clean surfaces. If surface is oily or greasy, use Devcon Fast Cleaner 2000 Spray/Cleaner Blend 300 to degrease the surface. 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 cartridge, non-cartridge 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 epoxy to be dispensed, metered and directly applied to the surfaces to be bonded.

Please note: Once the product cures in the nozzle it has to be thrown away and a new nozzle used.

Non-Cartridge Form: Proper homogenous mixing of the two epoxy components of resin and hardener are essential for the curing and development of stated strengths. Always mix the two components with clean tools, preferably of a disposable design.

For small amounts use Devcon's 28g Devtube, which comes with it's own plunger to extrude the two components at an equal rate.

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 minimise any gap and ensure good contact of the epoxy with the mating part. A small amount 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, shock loaded or heavily loaded.

Cure:

Cure time for 5-minute epoxy is 45 – 60 minutes for a functional cure. Full bond strength is reached in 16 hours.

STORAGE AND 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.

PRECAUTION

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



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ORDERING INFORMATION

<u>Stock No</u>	<u>Unit size</u>	<u>Stock No</u>	<u>Unit size</u>
14251	28g Devtube	20015	50ml Manual Applicator Gun
14210	70g Non-Cartridge	14281	200ml Manual Applicator Gun
14201	500g Non-Cartridge	20020	400ml Manual Applicator Gun
14270	50ml Cartridge	20015	50ml Static Mixer Nozzle
14271	200ml Cartridge	29999	200/400ml Static Mixer Nozzle
14272	400ml Cartridge		
19550	Fast Cleaner 2000 Spray		
19510	Cleaner Blend 300 250ml		

Warranty: Devcon will replace any material found to be defective. Because the storage, handling and application of this material are 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 technical assistance please call 01933 675299