



TECHNICAL DATA SHEET – 1 MINUTE EPOXY A SUPER-FAST GENERAL PURPOSE THIXOTROPIC EPOXY

Revised: 05/2018

ORDERING INFORMATION

STOCK NO.: 14277

PACKAGE SIZE: 50ml Cartridge

DESCRIPTION

A super-fast general purpose thixotropic epoxy adhesive for applications requiring fast fixing. This quick curing formula is excellent for bonding metals, fiberglass, and ceramics.

FEATURES

- Non-sagging on vertical and overhead surfaces
- 100% reactive, no solvents
- Part fixturing in less than 1 minute

RECOMMENDED APPLICATIONS

- Ideal for repairing or assembling furniture, jewellery, china, appliances and models
- Fast cure metal-to-metal bonding and repairs
- Suitable for bonding metals, glass, fibreglass, fabrics and ceramics

PRODUCT DATA

PHYSICAL PROPERTIES (UNCURED)

COLOUR	Translucent
MIXED VISCOSITY, CPS	70,000 cps
MIXED RATIO BY VOLUME	1:1
MIXED RATIO BY WEIGHT	1:1
MIXED DENSITY	1.13 gm/cc
WORKING TIME 28GM @23°C	45 seconds
FIXTURE TIME @23°C	1 minute
FUNCTIONAL CURE @ 23°C	30 – 45 minutes
FULL CURE	2 hours

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

ADHESIVE TENSILE SHEAR, (STEEL) ASTM D1002	11 MPa
T PEEL	4 – 5 N/10mm
SERVICE TEMPERATURE, DRY	-40 - 93°C
CURED HARDNESS, ASTM D2240	82D
DIELECTRIC STRENGTH, ASTM D2566	19.6 KV/mm
TENSILE ELONGATION	1%
% SOLID BY VOLUME	100
SPECIFIC VOLUME	884 cm³/kg

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				•
SULPHURIC 10%	•			
ACETONE	•			
CORN OIL				•
ETHANOL	•			
GLYCOLS / ANTIFREEZE		•		
ISOPROPANOL	•			
MEK	•			
MOTOR OIL				•

Please consult Devcon for other chemicals.

APPLICATION INFORMATION

GENERAL SURFACE PREPARATION

1 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 optimize the bond strength.

MIXING

This product is available in cartridge form only. The cartridge should be used with a Manual Applicator Gun and a 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.

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 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 1 year 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 Material 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 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. 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.

ITW PERFORMANCE POLYMERS

Bay 150 | Shannon Industrial Estate | Shannon, County Clare | Ireland | T: +353 61 771500 | customerservice.shannon@itwpp.com | www.itwperformancepolymers.com