



5-MINUTE EPOXY



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

FEATURES

- 7-minute fixture time
- 100% reactive, no solvents
- Good dielectric strength
- Good solvent resistance
- Bonds metals, fabrics, ceramics, glass, wood and concrete (in combinations)

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 40°F

PRODUCT DATA

Physical Properties - (uncured)

Color.....	Clear
Mix Ratio By Volume.....	1:1
Mixed Viscosity.....	8,000-10,000 cps
Working Time 28 Grams @ 75°F.....	4 minutes
Functional Cure @ 75°F.....	45 minutes
Coverage (Based on 25 ml).....	152 sq.in. @ .010"
Specific Volume.....	23.7 in ³ /lb.
% Solids by Volume.....	100

Performance Characteristics - (7 days cured @ 75°F)

Adhesive tensile shear, ASTM D1002*.....	1,400 psi
Operating temperature, dry.....	-40°F to +200°F
Cured density ASTM D792.....	1.10 gm/cm ³
Cured hardness, ASTM D2240.....	85D
Dielectric strength ASTM D149 (volts/mil).....	490 volts/mil

*Overlap shear run @ 0.005" bond line thickness.

Chemical Resistance: 7 days room temperature cure (30 days immersion @ 75°F)

Kerosene	VG	Methanol	U
3% Hydrochloric Acid	VG	Toluene	VG
Chlorinated Solvent	U	Ammonia	VG
10% Sulfuric Acid	VG	10% Sodium Hydroxide	VG

Key: VG = Very Good F = Fair U = Unsatisfactory

PLEASE CONSULT FACTORY FOR OTHER CHEMICALS.

Epoxyes are very good in saturated salt solution, leaded gasoline, mineral spirits, ASTM #3 oil and propylene glycol. Epoxyes 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. Surfaces should be solvent-wiped, free of heavy deposits of grease, oil, dirt or other contaminants, or cleaned with industrial cleaning equipment such as vapor 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:

Proper homogeneous 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 25 ml Dev-Tube™ package or the 50ml. Dev-Pak with Mark 5 Applicator. If used with a static mix nozzle, the epoxy can be dispensed, metered, mixed, and directly applied to the surfaces to be bonded.

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 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 3/4 to 1 hour 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 70°F (22°C) in their original containers.

PRECAUTION:

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

For technical assistance, please call 1-800-933-8266.

ORDERING INFORMATION: *

<u>Stock No.</u>	<u>Unit Size</u>	<u>Stock No.</u>	<u>Unit Size</u>
14250	25 ml Dev-Tube	14280	Mark 5 applicator gun
14210	2-1/2 oz. (2 tubes)	14285	Mark 5 mix nozzle
14200	15 oz. (2 tubes)	14410	400ml manual applicator
14630	9 lb. (1 gal.)	14400	400ml pneumatic applicator
14270	50ml Mark 5 (Dev-Pak)	14291	1/4" dia. mix nozzle
DA051	380ml cartridge	14292	1/2" dia. mix nozzle

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.