

# 5 Minute<sup>®</sup> Epoxy

## ORDERING INFORMATION

	<u>Stock No.</u> 14251 14210 14201 14270 14272	<u>Package Size</u> 28g Dev-tube 70g Twin-tube 500g Tub 50ml Cartridge 400ml Cartridge
<b>Description</b>	A rapid-curing, general-purpose adhesive / encapsulant. It forms a hard, rigid bond or coating in minutes	
<b>Features</b>	<ul style="list-style-type: none"> <li>• 100% reactive, no solvents</li> <li>• Good dielectric strength</li> <li>• Good solvent resistance</li> </ul>	
<b>Intended Use</b>	<ul style="list-style-type: none"> <li>• Cures fast for quick metal to metal bonding and repairs</li> <li>• Pots and encapsulates electronic components and assemblies</li> <li>• Suitable for bonding metals, fabrics, ceramics, glass, wood and concrete (in combinations)</li> </ul>	

## PRODUCT DATA

<b>Physical Properties (Uncured)</b>	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			
<b>Performance characteristics (cured)</b>	<b>7 days cured at 24°C</b>			
	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 <sup>3</sup> /kg		
	% solids by volume	100		
	Cured hardness, ASTM D2240	85D		
Dielectric strength, ASTM D149	490 volts/mil			
<b>Chemical Resistance</b>	<b>7 days room temperature cure (30 days immersion)</b>			
	Acetic (dilute)10%	Poor	Acetone	Poor
	Ammonia	Poor	Corn Oil	Excellent
	Cutting oil	Excellent	Ethanol	Poor
	Petrol (unleaded)	Excellent	Glycols/Antifreeze	Fair
	Hydrochloric 10%	Poor	Isopropanol	Poor
	Kerosene	Excellent	MEK	Poor
	Mineral Spirits	Excellent	Motor Oil	Excellent
	Sodium Hydroxide 10%	Poor	Sulphuric 10%	Poor

Please contact ITW Devcon for other chemicals

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## APPLICATION INFORMATION

<b>Surface Preparation</b>	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.
<b>Mixing</b>	<p>This product is available in cartridge, non-cartridge and 28g Devtube form.</p> <p>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.</p> <p>Please note: Once the product cures in the nozzle it has to be thrown away and a new nozzle used.</p> <p>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.</p> <p>For small amounts use Devcon's 28g Devtube, which comes with it's own plunger to extrude the two components at an equal rate.</p>
<b>Application</b>	<p>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.</p> <p>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.</p>
<b>Storage Shelf Life</b>	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.
<b>Precaution</b>	For complete safety and handling information please refer to the appropriate Materials Safety Data Sheets prior to using this product.
<b>Warranty</b>	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.
<b>Disclaimer</b>	<p>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.</p> <p>For product information visit <a href="http://www.devconeurope.com">www.devconeurope.com</a> alternatively for technical assistance please call +44 (0) 870 458 7388 (UK) or +49 431 718830 (Germany)</p>