

# 2 Ton Epoxy

## ORDERING INFORMATION

	<u>Stock No.</u> 14260 20222	<u>Package Size</u> 50ml Cartridge 200ml Cartridge
<b>Description</b>	A high strength, non-shrinking, adhesive/potting compound specially formulated for high clarity, good impact strength, and water resistance. The adhesive bond is resistant to weathering, solvents, and wide variations in temperature.	
<b>Features</b>	<ul style="list-style-type: none"> <li>• 100% reactive, no solvents</li> <li>• Good water and chemical resistance</li> <li>• Fills gaps and voids</li> <li>• Room temperature curing</li> </ul>	
<b>Recommended applications</b>	<ul style="list-style-type: none"> <li>• Bonding or potting electronic components and assemblies</li> <li>• Creating moisture-resistant seals</li> <li>• Suitable for bonding ceramics, ferrous and non-ferrous, ferrites, wood, glass and concrete</li> </ul>	

## PRODUCT DATA

<b>Physical Properties (Uncured)</b>	Colour	Clear		
	Mixed Viscosity	8,000cps		
	Mixed Ratio by Volume	1:1		
	Mixed Ratio by weight	1.2:1		
	Mixed Density	1.10 gm/cc		
	Working time 28 grams @ 23°C	8 – 12 minutes		
	Fixture time @ 23°C	30 – 35 minutes		
	Functional cure @ 23°C	2 hours		
	Full Cure	12 hours		
<b>Physical Properties (Cured)</b>	<b>7 days cured @ 24°C</b>			
	Adhesive tensile shear, ASTM D1002	15.5 MPa (0.25 mm bondline)		
	T peel	4-5 N/10mm		
	Tensile Elongation	1%		
	Service temperature, dry	-40 – 93°C		
	Cured hardness, ASTM D2240	83D		
	Dielectric strength, ASTM D149	24 KV/mm		
	Compression strength, ASTM D695	75.86 MPa		
	Specific Volume	909 cm <sup>3</sup> /kg		
<b>Chemical Resistance</b>	<b>7 days room temperature cure (30 days immersion)</b>			
	Acetic (dilute) 10%	Poor	Acetone	Fair
	Ammonia	Very Good	Corn Oil	Excellent
	Cutting oil	Excellent	Ethanol	Poor
	Petrol (unleaded)	Excellent	Glycols/Antifreeze	Excellent
	Hydrochloric 10%	Poor	Isopropanol	Poor
	Kerosene	Excellent	MEK	Poor
	Mineral Spirits	Excellent	Motor Oil	Excellent
	Sodium Hydroxide 10%	Very Good	Sulphuric 10%	Poor

Please consult ITW Devcon for other chemicals

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### **APPLICATION INFORMATION**

<b>General Surface Preparation</b>	2 Ton 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 vapor degreasers or hot aqueous baths. Abrading or roughing the surfaces of metals will increase the microscopic bond area significantly and optimize the bond strength.
<b>Mixing</b>	This product is available in two cartridge sizes. 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.
<b>Application</b>	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.
<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. The expiry will be displayed on the product packaging.
<b>Precaution</b>	For complete safety and handling information, please refer to the appropriate Material 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>	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 product information visit <a href="http://www.devconeurope.com">www.devconeurope.com</a> alternatively for technical assistance please call +353 61 771501 (Ireland) or +49 (0) 431 717910 (Germany)