

5 Minute[®] Epoxy

ORDERING INFORMATION

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| | <u>Stock No.</u> 14251 14210 14270 14272 | <u>Package Size</u> 25ml Dev-tube 70g Twin-tube 50ml Cartridge 400ml Cartridge |
| Description | A rapid-curing, general-purpose adhesive / encapsulant. It forms a hard, rigid bond or coating in minutes | |
| Features | <ul style="list-style-type: none"> • 100% reactive, no solvents • Good dielectric strength • Good solvent resistance | |
| Intended Use | <ul style="list-style-type: none"> • Cures fast for quick metal to metal bonding and repairs • Pots and encapsulates electronic components and assemblies • Suitable for bonding metals, fabrics, ceramics, glass, wood and concrete (in combinations) | |

PRODUCT DATA

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| Physical Properties (Uncured) | 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 | | | |
| Performance characteristics (cured) | 7 days cured at 24°C | | | |
| | 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 ³ /kg | | |
| | % solids by volume | 100 | | |
| | Cured hardness, ASTM D2240 | 85D | | |
| Dielectric strength, ASTM D149 | 19.6 KV/mm | | | |
| Chemical Resistance | 7 days room temperature cure (30 days immersion) | | | |
| | 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

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| Surface Preparation | 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. |
| Mixing | This product is available in cartridges, 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 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. Where only small amounts are required the 28g Devtube, which comes with it's own plunger to extrude the two components at an equal rate can be used. Material must then be manually mixed before application. |
| 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 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 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. |
| Precaution | For complete safety and handling information please refer to the appropriate Materials 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 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. For product information visit www.devconeurope.com alternatively for technical assistance please call +353 61 771501 (Ireland) or +49 (0) 431 717910 (Germany) |