

Extra Low Viscosity Epoxy Resin



Technical Data Sheet

DESCRIPTION	Megapoxy HX is a specially formulated extra low viscosity, 100% solids, resin based, solvent-free, hydrophilic liquid resin. Megapoxy HX is used regularly for the repair of cracked concrete by gravity penetration or low pressure injection. Megapoxy HX is also suitable for impregnation of porous substrates such as masonry and timber. Megapoxy HX has also been used successfully as a low viscosity laminating resin for fibreglass work.	
RECOMMENDED APPLICATIONS	<ul style="list-style-type: none"> • Casting • Concrete Crack Repair • Low Pressure Injection • Surface Hardening • Floor Repairs • Laminating • Masonry Sealing • Capillary Action • Vacuum Bagging 	
PROPERTIES	<p>Mixing Ratio by Volume</p> <p>Work Time at 25°C:</p> <p>Minimum Cure Time at 15°C</p> <p>Minimum Cure Time at 25°C</p> <p>Minimum Cure Time at 35°</p> <p>Thin Film Cure at 25°C</p> <p>Minimum Application Temperature</p> <p>Viscosity Part A at 25°C</p> <p>Viscosity Part B at 25°C</p> <p>Mixed Viscosity at 25°C</p> <p>S.G. Part A at 25°C</p> <p>S.G. Part B at 25°C</p> <p>Mixed S.G. at 25°C</p> <p>Colour Part A</p> <p>Colour Part B</p>	<p>3 Part A to 1 Part B</p> <p>60 minutes</p> <p>48 hours</p> <p>24 hours</p> <p>12 hours</p> <p>4 - 6 hours</p> <p>10°C</p> <p>400 - 600cps</p> <p>15 - 20cps</p> <p>200cps</p> <p>1.10 - 1.12</p> <p>0.95 - 0.97</p> <p>1.07</p> <p>Clear</p> <p>Clear</p>
CURED PROPERTIES	<p>Compressive Strength - ASTM D695</p> <p>Bond Strength Concrete - ASTM D4541</p> <p>Tensile Bond Strength Steel - ASTM D897</p> <p>Modulus of Elasticity - ASTM D695</p> <p>Flexural Strength - ASTM D790</p> <p>Tensile Strength - ASTM 638</p> <p>Tensile Shear Strength - ASTM D1002</p> <p>Hardness - Shore D - ASTM D2240</p> <p>95Mpa</p> <p>>3Mpa</p> <p>20Mpa</p> <p>11Gpa</p> <p>35Mpa</p> <p>35Mpa</p> <p>10Mpa</p> <p>>75</p>	

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CHARACTERISTICS	<ul style="list-style-type: none"> • VOC Free • Hydrophilic • Thin Liquid • Mixes easily by hand • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	<p>Concrete</p> <p>Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitance. This is best done by mechanical abrasion such as scabbling, grit blasting or grinding. If this is not possible acid etching must be carried out. Mix concentrated hydrochloric acid with equal volume of water and spread at the rate of 0.5 litre per square meter of concrete surface. Allow to react for about 10 minutes and wash the area thoroughly and scrub with a stiff bristled broom to remove loose sand. Allow to dry for 24 hours. For maximum adhesion the concrete should be surface dry.</p> <p>Metal Surfaces</p> <p>Metals should be grit blasted to AS CK 9.4 - 1964 Class 3 finish. If this is not possible, mechanically abrade the surface to a clean, bright metal surface. Once this abrasion is complete, degrease the surface by flooding with an industrial grade degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only.</p> <p>Coated Surfaces</p> <p>It is recommend to remove all coatings prior to bonding, bonding to coated surfaces will give inferior bond strengths compared to bonding directly to a prepared substrate.</p> <p>Concrete:</p> <p>The surface may be either flame-cleaned, or mechanically treated with a scutching tool, to remove all traces of paint. Complete the preparation by diamond grinding or scabbling.</p> <p>Metals:</p> <p>Steps should be taken to remove all paint and/or galvanizing. Good quality paint stripper should be used, followed by grit blasting or grinding to a bright metal finish.</p>
IMPORTANT INFORMATION	<p>It is essential that the correct mixing ratio be used and that the Part A and Part B” are thoroughly mixed together before use. Inaccuracies and poor mixing will result in lower physical properties of the cured system and, if the error is sufficiently large, the system may not cure satisfactorily and discolour on ageing.</p>
CLEANING	<p>To keep mixing implements and working tools clean, use Megapoxy Thinners. Use disposable rubber gloves to protect hands and maintain proper industrial hygiene. For further details refer to the Megapoxy PF Safety Data Sheet.</p>
PACKAGING	<p>Megapoxy HX is available in 4lt & 20lt kits. Product should be stored in cool dry store.</p>
TECHNICAL SERVICE	<p>All purchasers of Megapoxy Products, are encouraged to avail themselves of our Technical Service for our Megapoxy Products. The information in this Bulletin is correct at time of publication, however continual research and development is being carried out and specs may change without notice.</p>