



Technical Data Sheet

DESCRIPTION	<p>Megapoxy PM is a specially formulated non-sag epoxy filling and adhesive paste. This easy to use two-part epoxy product sets after mixing with excellent properties ideally suited for a wide range of applications.</p> <p>Megapoxy PM is Very Low in volatile organic compounds (Very Low VOC).</p> <p>Properly mixed Megapoxy PM will not stain or discolour white or light coloured marble and ceramics.</p>																													
RECOMMENDED APPLICATIONS	Bonding <ul style="list-style-type: none"> • Precast concrete articles • Metal to metal or concrete • Grouting bolts • Natural stones • Bricks and ceramics • Bonding compressed cement sheet 	Filling and Repair <ul style="list-style-type: none"> • Concrete pipes and tanks • Fibreglass articles • Concrete floors and stairs • Concrete column • Insitu formed concrete • Flush-filling countersunk screws in fibre cement sheet 																												
PROPERTIES	<table border="1"> <tr> <td>Mixing Ratio by Volume</td> <td>1 Part A to 1 Part B</td> </tr> <tr> <td>Work Time at 25°C:</td> <td>45 minutes</td> </tr> <tr> <td>Minimum Cure Time at 15°C</td> <td>48 hours</td> </tr> <tr> <td>Minimum Cure Time at 25°C</td> <td>24 hours</td> </tr> <tr> <td>Minimum Cure Time at 35°C</td> <td>12 hours</td> </tr> <tr> <td>Full Cure at 25°C</td> <td>4 Days</td> </tr> <tr> <td>Colour Part A</td> <td>White</td> </tr> <tr> <td>Colour Part B</td> <td>Natural or Grey</td> </tr> <tr> <td>Colour Mixed</td> <td>White or Grey</td> </tr> <tr> <td>Minimum Application Temperature</td> <td>10°C</td> </tr> <tr> <td>Maximum Operating Temperature</td> <td>70°C</td> </tr> <tr> <td>Colour Part A</td> <td>White</td> </tr> <tr> <td>Colour Part B</td> <td>Natural or Dark Grey</td> </tr> <tr> <td>Appearance Mixed</td> <td>White or Grey</td> </tr> </table>		Mixing Ratio by Volume	1 Part A to 1 Part B	Work Time at 25°C:	45 minutes	Minimum Cure Time at 15°C	48 hours	Minimum Cure Time at 25°C	24 hours	Minimum Cure Time at 35°C	12 hours	Full Cure at 25°C	4 Days	Colour Part A	White	Colour Part B	Natural or Grey	Colour Mixed	White or Grey	Minimum Application Temperature	10°C	Maximum Operating Temperature	70°C	Colour Part A	White	Colour Part B	Natural or Dark Grey	Appearance Mixed	White or Grey
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CURED PROPERTIES	Ultimate Compressive Strength - ASTM C579	65MPa
	Bond Strength Concrete - ASTM 7234	>3MPa (concrete failure)
	Tensile Bond Strength Steel - ASTM D897-08	18MPa
	Modulus of Elasticity - ASTM C579	2GPa
	Flexural Strength - ASTM D790-18	39MPa
	Tensile Strength - ASTM D638-23	22MPa
	Tensile Lap Shear Strength - ASTM D1002-00	9MPa (steel to steel)
	Tensile Lap Shear Strength - ASTM D1002-00	5MPa(steel to aluminium)
	Tensile Lap Shear Strength - ASTM D1002-00	3.9MPa (aluminium to aluminium)
	Hardness - Shore D - ASTM D2240-000	70
	Coefficient of Linear Thermal Expansion. Mean	70.4×10^{-6} (mm/mm/°C)
	Dielectric Strength (kV/cm)	23.1
	Surface Resistivity (Ohm) - ASTM D257	10^{12}
	Volume Resistivity (Ohm.cm)	1.3×10^{11}
	VOC (g/l) - ASTM D3960	4
	Water Vapour Transmission - ASTM E96/E96M	0.000 (gram/hr m ²)
Water Absorption - ASTM D570	0.201 Increase in weight (%)	
CHARACTERISTICS	<ul style="list-style-type: none"> • Very Low VOC • Simple 1:1 mix ratio • Creamy Texture, blend easily • Non sag on vertical & overhead surfaces • Adheres and cures under adverse conditions (cold & damp) 	<ul style="list-style-type: none"> • Good strength retention after prolonged immersion in water • High strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance • Flash Point above 200°C

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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 1627.2.2002. 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 PM Safety Data Sheet.</p>
PACKAGING	<p>Megapoxy PM is available in 4lt & 20 litre kits and in Grey or White. 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>