

Heavy Duty Maintenance Coating



Technical Data Sheet

DESCRIPTION	<p>Megapoxy MC is a two component heavy duty, 100% solids, high build, highly chemical resistant and heavy duty maintenance coating suitable for a variety of commercial and industrial floor, wall and steel protection applications. Megapoxy MC provides a decorative, hygienic, dust free coating with heavy abrasion resistance. Megapoxy MC is resistant to hydrogen sulphide that may be present in pipes and plants for the treatment of sewage.</p> <p>It is recommended that Megapoxy MC is applied in a three coat application when used in particularly aggressive and harsh environments. This three coat application will give a total cured maintenance coating thickness of 0.4 - 0.5 mm. Megapoxy MC is volatile organic compounds free (Nil V.O.C.) is suitable for coating and protecting structures that are in contact with foodstuffs.</p>																																								
RECOMMENDED APPLICATIONS	<ul style="list-style-type: none">Food, Beverage Facilities including AbattoirsChemical Storage Tanks and BundsProtective Coatings for Concrete and SteelCar Parks and Ramps including Forklift AreasFactory and Warehouse FloorsMechanical WorkshopsSewage Treatment Plants and PipesPlant Rooms and Machine Rooms																																								
PROPERTIES	<p>Megapoxy MC is available in either a Standard Cure version or in a Rapid Setting version called Megapoxy MC2.</p> <table><thead><tr><th></th><th>Megapoxy MC (std)</th><th>Megapoxy MC2 (Rapid)</th></tr></thead><tbody><tr><td>Mixing Ratio by Volume</td><td>3 Parts A to 1 Part B</td><td>3 Parts A to 1 Part B</td></tr><tr><td>Mixing Ratio by Weight</td><td>4 Parts A to 1 Part B</td><td>4 Parts A to 1 Part B</td></tr><tr><td>Work Time at 25°C:</td><td>2 hours</td><td>30 minutes</td></tr><tr><td>Tack Free Time at 25°C</td><td>4 hours</td><td>2 hours</td></tr><tr><td>Re-Coat Time 25°C</td><td>8 hours</td><td>4 hours</td></tr><tr><td>Minimum Cure Time at 25°C</td><td>24 hours</td><td>24 hours</td></tr><tr><td>Minimum Application Temperature</td><td>10°C</td><td>10°C</td></tr><tr><td>Coverage - 5kg Kit</td><td>20 - 25m²</td><td>20 - 25m²</td></tr><tr><td>Coverage - 20kg Kit</td><td>80 - 100m²</td><td>80 - 100m²</td></tr><tr><td>Maximum Operating Temperature</td><td>100°C</td><td>100°C</td></tr><tr><td>Colour Part A</td><td>Various - See Colour Chart</td><td>Various - See Colour Chart</td></tr><tr><td>Colour Part B</td><td>Amber</td><td>Clear</td></tr></tbody></table>			Megapoxy MC (std)	Megapoxy MC2 (Rapid)	Mixing Ratio by Volume	3 Parts A to 1 Part B	3 Parts A to 1 Part B	Mixing Ratio by Weight	4 Parts A to 1 Part B	4 Parts A to 1 Part B	Work Time at 25°C:	2 hours	30 minutes	Tack Free Time at 25°C	4 hours	2 hours	Re-Coat Time 25°C	8 hours	4 hours	Minimum Cure Time at 25°C	24 hours	24 hours	Minimum Application Temperature	10°C	10°C	Coverage - 5kg Kit	20 - 25m ²	20 - 25m ²	Coverage - 20kg Kit	80 - 100m ²	80 - 100m ²	Maximum Operating Temperature	100°C	100°C	Colour Part A	Various - See Colour Chart	Various - See Colour Chart	Colour Part B	Amber	Clear
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CURED PROPERTIES	Compressive Strength - ASTM D695	70Mpa (MC2 only)
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897	13Mpa
	Modulus of Elasticity - ASTM D695	2.4Gpa
	Tensile Strength - ASTM D638	30Mpa
	Hardness - Shore D - ASTM D2240	80
	Dielectric Strength 50Hz @25°C(Kv/mm)	17
CHARACTERISTICS	<ul style="list-style-type: none"> • VOC Free • Pre-metered easy to use kit • Easily mixed by hand or mechanically • Great Coverage • Can be applied by brush, roller, squeegee (MC2 only) or airless spray 	<ul style="list-style-type: none"> • Accepts fine aggregates broadcast between coats for non-slip • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance • Gloss finish
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 recommended 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>	

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MIXING PROCEDURE

Add the entire contents of Part B into the Part A tin, there is enough space to combine both parts in the Part A container.

Megapoxy MC 5kg kits & 20kg kits

Mix the two parts together thoroughly for a minimum of 3 minutes, by hand or using a mechanical stirrer on a low speed of 200rpm or lower, making sure to scrape the base and corners of the drum, after 3 minutes, scrape the side of the drum and mix for a further 2 minutes.

Set a timer do not guess the time.

Megapoxy MC2 5kg kits

Mix the two parts together thoroughly for a minimum of 2 minutes, by hand or using a mechanical stirrer on a low speed of 200rpm or lower, making sure to scrape the base and corners of the drum, after 2 minutes, scrape the side of the drum and mix for a further 1 minute.

Set a timer do not guess the time.

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.

APPLICATION

It is recommended that Megapoxy LVS - Low Viscosity Sealer is used as a primer on particularly porous surfaces before the application of Megapoxy MC. Megapoxy LVS can be applied either by roller, brush or spray equipment at a rate of 8-10m² per litre. Single coat application of Megapoxy LVS is generally all that is required and thinning is not recommended. Recoat or overcoat approximately between 8 – 24 hours after application of Megapoxy LVS.

Megapoxy MC can be thinned up to 10% with Megapoxy Thinners to promote easy working. Add a maximum of 10% Megapoxy Thinners on the first coat, 5% on the second coat and so on. However, care must be taken to ensure that all thinners have evaporated before applying subsequent coats.

If more than 24 hours elapses between coats, it is necessary to thoroughly abrade the coated surface to a uniform dull finish using 60 grit abrasive paper.

NON-SLIP SURFACES

If you wish to have a non slip surface, broadcast epoxy quality sand, glass beads, carborundum or silicone oxide over the first freshly applied coat. This can either be left as is for an aggressive non slip surface, Then re-coat with Megapoxy MC to lock the aggregate in-between coats.

A fine aggregate can also be mixed through the Megapoxy MC.

Once the Megapoxy MC has been thoroughly mixed, the addition of approximately 250gms of required aggregate size per 5kgs of Megapoxy MC, should give a fairly even coat of non-slip when using a roller on the surface to be coated. Depending on the grip level required, this can be done in all coats or just the first one.

CLEANING

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 MC Safety Data Sheet.



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PACKAGING	<p>Megapoxy MC & MC2 are available in 5kg kits and 20kg kits.</p> <p>5kg kits: Caribbean Blue, Blue, Pacific Blue, Charcoal, Dark Grey, Mid Grey, Grey, Koala Grey, Safety Yellow, White, Black.</p> <p>20kg kits: Charcoal, Dark Grey, Mid Grey, Grey</p> <p>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>
STANDARD COLOURS FOR MEGAPOXY MC	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Caribbean</p> </div> <div style="text-align: center;">  <p>Koala Grey</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Blue</p> </div> <div style="text-align: center;">  <p>Safety Yellow</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pacific Blue</p> </div> <div style="text-align: center;">  <p>White</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Charcoal</p> </div> <div style="text-align: center;">  <p>Black</p> </div> </div> <div style="text-align: center;">  <p>Dark Grey</p> </div> <div style="text-align: center;">  <p>Mid Grey</p> </div> <div style="text-align: center;">  <p>Grey</p> </div> <div data-bbox="928 1233 1283 1516"> <p>Please Note; These colours are a digital/print representation of our standard Megapoxy MC colours. The finished product may be different to these colours. For accurate colour samples please contact our Technical Department or sample Megapoxy MC colour chips.</p> </div>