

Water Based Epoxy Coating

Technical Data Sheet

DESCRIPTION	<p>Megapoxy 154 is a two component water based epoxy which combines the superior adhesion and toughness of Megapoxy resins with the advantages of using water as a carrier.</p> <p>Megapoxy 154 is used to prime, coat and seal concrete and masonry surfaces.</p> <p>Megapoxy 154 cures to a matte, tough, chemical and water resistant coating with excellent adhesion to sound concrete.</p> <p>Megapoxy 154 is recommended for use as a protective coating on concrete surfaces exposed to chemicals, foot traffic and light vehicular traffic. Since Megapoxy 154 is an environmentally friendly product it is particularly suited to large areas such as car parks and warehouses etc.</p>																							
RECOMMENDED APPLICATIONS	<ul style="list-style-type: none"> • Primer for damp surfaces • Moisture barrier on damp surfaces • Sealing concrete slabs before vinyl and timber overlays • Dust sealing for interior concrete floors • Concrete curing membrane • Primer for acrylic and polyurethane membranes (excluding WBE Clear) 																							
PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Mixing Ratio by Volume</td> <td style="padding: 2px;">1 Part A to 1 Part B</td> </tr> <tr> <td style="padding: 2px;">Work Time at 25°C:</td> <td style="padding: 2px;">60 minutes</td> </tr> <tr> <td style="padding: 2px;">Minimum Thin Film Cure Time at 25°C</td> <td style="padding: 2px;">140-180 minutes</td> </tr> <tr> <td style="padding: 2px;">Minimum Application Temperature</td> <td style="padding: 2px;">10°C</td> </tr> <tr> <td style="padding: 2px;">Maximum Operating Temperature</td> <td style="padding: 2px;">80°C</td> </tr> <tr> <td style="padding: 2px;">Colour Part A</td> <td style="padding: 2px;">White</td> </tr> <tr> <td style="padding: 2px;">Colour Part B</td> <td style="padding: 2px;">Brown</td> </tr> <tr> <td style="padding: 2px;">Colour Mixed</td> <td style="padding: 2px;">White</td> </tr> <tr> <td style="padding: 2px;">S.G. Part A at 25 C</td> <td style="padding: 2px;">1.05 -1.10</td> </tr> <tr> <td style="padding: 2px;">S.G. Part B at 25 C</td> <td style="padding: 2px;">0.95 - 0.99</td> </tr> <tr> <td style="padding: 2px;">Mixed S.G. at 25 C</td> <td style="padding: 2px;">1.02</td> </tr> </table>		Mixing Ratio by Volume	1 Part A to 1 Part B	Work Time at 25°C:	60 minutes	Minimum Thin Film Cure Time at 25°C	140-180 minutes	Minimum Application Temperature	10°C	Maximum Operating Temperature	80°C	Colour Part A	White	Colour Part B	Brown	Colour Mixed	White	S.G. Part A at 25 C	1.05 -1.10	S.G. Part B at 25 C	0.95 - 0.99	Mixed S.G. at 25 C	1.02
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CHARACTERISTICS CONTINUED	<ul style="list-style-type: none"> • Water based epoxy • Environmentally friendly • Excellent water resistance • Superior adhesion to fresh concrete • Excellent adhesion and penetration to damp surfaces and green concrete • Excellent oil resistance • High resistance to chemicals 																							
SURFACE PREPARATION	<p>All surfaces must be structurally sound and all previous coatings, adhesives, efflorescence or laitance should be removed by grinding, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or any other suitable means. All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants. Holes, non-structural cracks and other surface deformities should be repaired with other Megapoxy products before application of Megapoxy 154.</p>																							

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MIXING PROCEDURE	<p>Mixing Megapoxy 154 is simple process. Mix 1 Part A with 1 Part B by Volume. Place into a clean mixing vessel, such as plastic bucket and stir for minimum 3 minutes or until sufficiently mixed. After the Part A (resin) and Part B (hardener) are sufficiently mixed up to 25% water can be added and mixed until completely homogeneous. Accurate measurement and thorough mixing is essential. Incomplete mixing will result in poor physical properties.</p> <p>Please Note; Do not mix resin, hardener and water at the same time. Resin and hardener must be mixed before the addition of any water.</p>
APPLICATION	<p>Porous concrete may require 3 coats of Megapoxy 154. Mixing should be done with the use of mechanical stirrers. Only mix as much as may be used within the pot life of the product.</p> <p>Megapoxy 154 is a minimum two-coat system. Applying with a brush or roller, ensure to work the material into the substrate surface to fill voids and eliminate pin holing. Successive coats should be applied at right angles to the previous coat. It is recommended that the coating depth be tested at random points with a wet film gauge.</p> <p>Smooth Finish: Apply by brush, roller or airless spray at a rate of 5 – 8 sqm / litre. Apply minimum 2 coats.</p> <p>Non-Slip Finish: If a fine non slip finish is required, it is possible to mix a fine epoxy grade sand aggregate into Megapoxy 154 and roll for even distribution. If a coarser non-slip finish is required then aggregate should be broadcast into the wet applied product and sealed with one or more subsequent coats.</p>
PRECAUTIONS	<p>Refer to Megapoxy 154 SDS prior to use. Megapoxy 154 cure rates will be dramatically slowed if the relative humidity is above 80%. Do not apply to steel or metal surfaces, as corrosion will occur.</p> <p>Do not add cementitious products to Megapoxy 154. Megapoxy 154 is not a waterproof membrane on its own. A dedicated waterproofing membrane should be used. In enclosed areas, such as water tanks or reservoirs, basements, or cubicles, ventilation should be provided to enable adequate evaporation of the coating.</p> <p>Allow to cure for a minimum of 24hours at 25°C and 50% Relative Humidity before applying other waterproof membranes, adhesives, mortars, decorative coatings or other surface treatments. Megapoxy 154 will tend to chalk and yellow when exposed to UV light. For external use apply a U.V. resistant top coat.</p> <p>Do not apply over any substrate that has been previously treated or coated with curing compounds, PVA concrete bonding agents and or acrylic coatings. These areas must be mechanically cleaned by grinding or shot blasting to produce a contamination free surface.</p> <p>Megapoxy 154 is rigid when cured and will not absorb movement cracks.</p> <p>When using Megapoxy 154 in cold temperatures follow mixing instructions and add at least 1 extra minute of mixing to ensure a homogeneous paste is obtained. Allow to stand for 5 minutes after mixing as this will accelerate the drying time.</p> <p>Cure rates will be dramatically slowed if substrate surface or ambient temperature is below +10°C. If Megapoxy 154 is applied in cooler conditions, substrate temperatures can produce amine blush, resulting in an oily residue and or areas of uncured tacky discolorations.</p> <p>Ensure removal of the contamination prior to application of any further coating to ensure adhesion of the next coat. Store Megapoxy 154 at 20°C for 24 hours prior to use. Warm substrate surface area by an air blower or use</p>

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IMPORTANT INFORMATION	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.
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 154 Safety Data Sheets.
PACKAGING	Megapoxy 154 is available in 20lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.