

MEGAPOXY MC Issue 2, 02/2000

## Heavy duty maintenance coating

Summary	MEGAPOXY MC is a heavy duty epoxy maintenance coating. Normally it is applied in three coats giving a total 0.4 to 0.5 mm dry film thickness which is resistant to abrasion, impact and wide range of chemicals. MEGAPOXY MC can be applied by airless spray equipment, roller or brush. The working time is sufficiently long (2 hours) to make the use of twin spray heads unnecessary.
Applications	<ul> <li>Corrosion protection of steel</li> <li>Protective coating of concrete</li> <li>Coating of storage tanks for chemicals, foodstuffs, fuel etc.</li> <li>Hygienic and dust free floor and wall coatings.</li> </ul>
Technical characteristics	Mixing ratio by weight - Part A: 4 parts - Part B: 1 part Working time: 2 hours at 25°C Tack-free time: 4 hours at 25°C Re-coating time: 4-12 hours at 25°C Coverage per 5 kg: 14 square metres at 0.25 mm
Surface preparation	<b>METALS</b> Metals should be grit blasted to AS CK 9.4 - 1964 Class 3 finish. If this is not possible, mechanically abrade to clean bright metal surface and degrease by flooding the abraded surface with MEGAPOXY Degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only <b>CONCRETE</b>
	Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitence. 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 metre of concrete surface. Allow reacting for about 10 minutes and washing the area thoroughly and scrub with a stiff bristled broom to remove loose sand. Allow to dry for 24 hours. For maximum adhesion concrete should be surface dry.
	PAINTED SURFACES Metals Steps should be taken to remove all paint. Good quality paint stripper should be used, followed by grit blasting.
	<b>Concrete</b> The surface may be either flame-cleaned, or mechanically treated with a scutching tool. Complete the preparation by grinding or scabbling.

**Megapoxy** HELLAS<sup>®</sup> Technical Bulletin

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Applicatio	on	added to the mix. He thinners have evapore	orking up to 10% MEGAPOXY Thinners can be owever, care must be taken to ensure that all prated before applying second coat. Thinners must nd or subsequent coats.		
Chemical resistance		The following information is based on tests conducted under continuous immersion conditions. In practice MEGAPOXY floor and wall coatings are cleaned regularly exposure to chemicals is limited to few hours at a time and the severity of attack is correspondingly reduced. In the case of tank and storage vessel coatings MEGAPOXY MC film is continuously exposed to chemicals. The data given apply to this condition.			
		<b>CHEMICALS WHICH HAVE NO EFFECT ON MEGAPOXY MC COATINGS</b> Distilled water at 40*C, Petrol, Power kerosene, Diesel fuel, Crude oil, Toluene, MIBK, Carbon tetrachloride, Styrene monomer, Glycerine, Hydrochloric acid all concentrations to 31%, Sulphuric acid all concentrations to 70%, Chromic acid 1%, Acetic acid 5%, Tartaric acid 5%, Citric acid 5%, Linseed fatty acid, Sodium hydroxide all concentrations, Ammonium hydroxide all concentrations to 15%, Detergent 100% liquid, Sodium carbonate 10%, Sodium bisulphate 10%, Methylated spirits, Coca-Cola.			
	CHEMICALS TO WH	IICH MEGAPOXY MC	COATINGS HAVE ONLY LIMITED RESISTANCE		
	Distilled water, boiling		Unaffected for 2 weeks, then blistered and film broke down after 1 month		
	Nitric acid all cond	centrations to 55%	Unaffected for 80 days, then film broke down		
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	37% Formaldehyde	Unaffected for 3 months, then film broke down
	Vinegar	Unaffected for 1 week, then film broke down
	Sulphuric acid concentrated	Complete break down in one day
	Phosphoric acid 57%	Unaffected for 80 days, then film broke down
	Lactic acid 5%	Unaffected for 15 days, then film broke down
	Cresylic acid and phenol	Film break down after 1 day
	Benzyl alcohol	Unaffected for 50 days, then film broke down
	Sodium hypochlorite 4%	Unaffected for 60 days, then film broke down

Availability	MEGAPOXY MC is available in 5.0 kg (approx 4 litre) and 20 kg (approx 16 litre) kits in white, grey and blue. Other colours can be produced to suit individual requirements.
Technical service	All purchasers of MEGAPOXY products are invited to avail themselves of our technical service on epoxy base materials. The methods and systems outlined in this bulletin are the best available at the present time, however continual research and development is being carried out and could result in change without prior notice.

Please do not hesitate to contact us, for any additional information.