Technical Bulletin



MEGAPOXY MC

HEAVY DUTY MAINTENANCE COATING

Corrosion protection of steel

Protective coating of concrete

Coating of storage tanks for chemicals, foodstuffs, fuel etc.

Hygienic and dust free floor and wall coatings.

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.

Mixing proportions : 4 parts "A" to 1 part "B" by weight

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 : 20 - 25 square metre

<u>Application</u>: To promote easy working up to 10% Megapoxy Thinners can be added to the mix. However, care must be taken to ensure that all thinners has evaporated before applying second coat. Thinners must not be used in second or subsequent coats.

<u>Availability</u>: 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.

Issue 2, Page 1 of 3, 3-11-98



SURFACE PREPARATION

<u>METALS</u>: 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.

<u>CONCRETE</u>: 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 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 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.

Concrete : The surface may be either flame-cleaned, or

mechanically treated with a scutching tool. Complete the preparation by grinding or

scabbling.

MEGAPOXY MC 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.

CHEMICALS WHICH HAVE NO EFFECT ON MEGAPOXY MC COATINGS

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 concentrations, Ammonium hydroxide all concentrations to 15%, Detergent 100% liquid, Sodium carbonate 10%, Sodium bisulphate 10%, Methylated spirits, Coca-Cola.

CHEMICALS TO WHICH MEGAPOXY MC COATINGS HAVE LIMITED RESISTANCE ONLY

Distilled water, boiling Unaffected for 2 weeks, then

blistered and film broke down after

1 month

Nitric acid all concentrations to 55% Unaffected for 80 days, then film

broke down

37% Formaldehyde Unaffected for 3 months, then film

broke down

Unaffected for 1 week, then film Vinegar

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 one day

Unaffected for 50 days, then film

broke down

Unaffected for 60 days, then film Sodium hypochlorite 4%

broke down

Issue 2, Page 3 of 3, 3-11-98

Benzyl alcohol