

MAXCHEM 100 – CHEMICAL RESISTANT EPOXY COATING

Description

MAXCHEM 100 – CHEMICAL RESISTANT EPOXY COATING. is a high build solvent-free epoxy coating designed for the long term protection of steel and concrete structures against corrosion, abrasion and chemical attack.

Operating temperature ranges from –20C to 60C. The two-component product is highly resistant to marine and industrial environments, buried conditions, ground water, effluents, salt water and a wide range of oils and chemicals

Applications

- Bund lining & coating
- Storage tank lining
- Chemical tank lining
- Structural steel
- Internal pipe lining
- Chemical process flooring
- Internal process vessel surfaces
- Marine Structures
- Effluent tanks

Surface Preparation Steel

All oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK or similar solvent. For optimum performance, the surface should be grit-blasted to **ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2)** and a minimum blast profile of 75 microns using an angular abrasive.

Once blast cleaned, the surface must be degreased and cleaned using MEK or similar solvent. All surfaces must be repaired before gingering or oxidation occurs

Where abrasive blast cleaning is not possible (excluding salt contaminated surfaces) the surface should be roughened by, needle gun or grinding. Under these conditions' adhesion levels will not be optimal although still satisfactory for most applications.

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Surface Preparation Salts

For salt contaminated surfaces the area must be grit-blast cleaned as mentioned above and left for 24 hours to allow any ingrained salts to come to the surface.

After this 24-hour period the surface must be washed with MEK prior to brush blasting to remove the surface salts. This process must be repeated until all ingrained contaminants have been sweated out of the surface.

Surface Preparation Concrete

Remove any contamination and lightly abrasive blast or scarify taking care not to expose the aggregate before application of **MAXCHEM 100 – CHEMICAL RESISTANT EPOXY COATING**. Allow new concrete to cure for a minimum of 21 days and likewise treat to remove any surface laitance before coating.

For optimum results on damp concrete, condition with **MAXPRIME 200 DAMP TOLERANT PRIMER**. Where the concrete is dry but highly porous, it is recommended to prime the concrete with **MAXPRIME 100 CONCRETE SURFACE PRIMER**.

Mixing

Warm the Base component to 15-25°C before mixing and do not apply when the ambient or substrate temperature is below 5°C or less than 3°C above dew point.

Mix both **PART-A** and **PART-B** together in full units as supplied.

For small batch mixing use a ratio of: **2.4:1 by volume or 4:1 by weight**

When mixing both materials, it is very important to have a uniform light or dark grey fluid that is streak free. Once mixing is complete, use the mixed paste as soon possible after mixing.

Transfer the contents of **PART - A** unit into the **PART - B** container and mix thoroughly until a uniform material free of any streaks is achieved. From the commencement of mixing the whole of the material should be used within 20-25 minutes at 20°C

Basecoat

Apply the mixed material onto the prepared surface by brush or roller. This should be in two coats at a target thickness of 250 microns per coat using a practical coverage rate of 3.5 sq metres per litre per coat.

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Continued:
Topcoat

Apply the second coat at a target thickness of 250 microns as soon as possible after the first coat is dry and not in excess of 36 hours. Use a practical coverage rate of 3.5 sq metres per litre per coat.

Spray Application

Where spray application is required, this should be carried out by airless spray using a 60:1 ratio pump with an input pressure of 60psi and a tip size of 0.025-0.03inches.

Warm the base to up to 40°C and ensure that the mixed material is at a temperature of 28-36°C. Use as short a line as possible to maintain product temperature circulating the product for a short time to achieve temperature equilibrium. The practical coverage rate for spraying is 1.5 sq metres per litre for a 500 micron coating

Pot Life

25 - 30 minutes at 20°C

Coverage

The material should be applied by brush or roller in two coats at a target thickness of 250 microns per coat using a practical coverage rate of 3.5 sqm per litre per coat.

The coverage rate stated is theoretical, practical coverage may vary due to substrate temperature, poor surface profile or pitting.

Cure Times

At 20°C the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Movement without load or immersion	6 hours
Light loading	12 hours
Full loading	4 days
Immersion	7 days

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Over-Coat Times

Minimum – the applied material can be over-coated as soon as it is touch dry.

Maximum – over-coating time **36 hours**

Where the maximum over-coating time is exceeded, the material should be allowed to harden before being abraded, or flash-blasted and solvent washed to remove any surface contamination

Health and Safety

Please ensure good practice is always observed during the mixing and application of this product.

Protective gloves must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read the fully detailed Material Safety Data Sheet.

Legal Notice

The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control.

It is the responsibility of the customer to determine the products suitability for use.

Maxkote accepts no liability arising out of the use of this information or the product described herein.