MAXKOTE

APPLICATION GUIDE

APG-REV2- 2022

M-CORR 100 – CHEMICAL EPOXY COATING

M-CORR 100 – Chemical Resistant Epoxy Coating

Is 2 pack solvent free epoxy coating with exceptionally high build capabilities. The material is tolerant to moisture and suitable for applications where surface preparation is less than perfect.

M-CORR 100 – CHEMICAL RESISTANT EPOXY COATING is designed for the long-term corrosion protection of steel surfaces in marine, coastal and industrial environments.

Typical Uses

- External coating for pumps and valves
- Marine jetties
- Internal and external pipe protection
- Tank lining and coating
- Steel work protection

Please contact us to discuss your project before purchasing this material to confirm suitability.

Application Guide

Surface Preparation - Metal - Grit Blast

- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK or similar type solvent.
- All surfaces must be abrasive blasted to ***ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2)*** minimum blast profile of 75 microns using an angular.
- Once blast cleaned the surface must be degreased and cleaned using MEK or similar type solvent.
- All surfaces must be coated before gingering or oxidation.

Surface Preparation - Metal - Hydro-Blast

- All surfaces must be hydro-blasted using clean water at 12,000 psi (850bar) to NACE 5 (SSPC SP13 WJ3-WJ1).
- All surfaces must be coated before gingering or oxidation occurs.

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Surface Preparation - Metal -Manual

- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- All surfaces must be mechanically abraded using handheld grinders to ISO 8501/4 ST3 (SSPC SP3 ST3).
- Once abraded, the surface must be degreased and cleaned using MEK or similar type material.
- All surfaces must be repaired before gingering or oxidation occurs.

Surface Preparation - Soluble Salts

PLEASE NOTE: Soluble salt contaminated surfaces the substrate must be pressure washed with clean water and checked for salt contamination this process may need to be repeated several times.

Environmental Checks

Prior to mixing, please ensure the following:

- The base component is at a temperature between 15-25°C.
- Do not apply the material when the ambient or substrate temperature is below 5°C.

Mixing

- Transfer the contents of the Activator unit into the Base container.
- Using a low-speed electric paddle mixer, mix the 2 components until a uniform material free of any streaks is achieved.
- Once mixing is complete use the mixed paste as soon possible after mixing.
- Use all mixed material within 20-25 minutes at 20°C.

Product Application

Brush & Roller

- Pour the mixed material into a paint kettle or paint tray (this will maximise the usable life).
- Stripe coat all edges, joints & corners.
- Once the stripe coat has cured and is capable of being overcoated, apply a basecoat at a minimum wet film thickness 250 microns.
- Once the basecoat has cured sufficiently, approximately 4 hours at 20°C, apply a topcoat at a minimum wet film thickness of 250 microns.

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Technical Information

Appearance	Base Activator Mixed	Highly structured thixotropic liquid Amber liquid Thixotropic liquid
Mixing Ratio	By Weight By Volume	4:1 2.4:1
Density	Base Activator Mixed	1.78 1.05 1.56
Solids Content		100%
Sag Resistance	Nil at	400 microns
Usable Life	10°C 20°C 30°C	60 minutes 30 minutes 15 minutes
Coverage	2 coat system to properly prepared surfaces at 400 microns:	4m² per ltr per coat
Cure Times at 20°C	Minimum overcoating time Maximum overcoating time Water/ sea water immersion Chemical immersion	4 hours 36 hours 3 days 5 days
Storage Life	Unopened and stored in dry conditions (15-30°C)	5 years
Abrasion Resistance	Taber CS17 Wheels/1 Kg load	138mg loss/1000 cycles 0.22cc loss/1000 cycles

Adhesion	Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile	194 kg/ cm² (2750 psi)
Compressive Strength	Tested to ASTM D 695	649kg/cm² (9200psi)
Impact Resistance	Tested to ASTM G14	2.0 joules
Cathodic Disbondment	Tested to ISO 21809-3:2016	28 days, 1.5v, 3% NaCl 23˚C 2.3mm 65˚C 5.1mm 95˚C 7.7mm
Corrosion Resistance	Tested to ASTM B117	5000 hours
Flexural Strength	Tested to ASTM D790	522kg/cm² (7400psi)
Hardness	Shore D to ASTM D2240	80
Heat Resistance	Suitable for use in immersed conditions at temperatures up to: Suitable for use in dry conditions at temperatures up to dependant on load:	60°C 200°C

Chemical Resistance Guide

Brine	40˚C
Crude Oil	40˚C
De-ionised Water	30˚C
Diesel	40˚C
Hydrochloric Acid 20%	40˚C
Naphtha	40˚C
Phosphoric Acid 30%	40˚C
Sodium Hydroxide 50%	40˚C
Sulphuric acid 20%	40˚C

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.

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