

APG-REV2- 2022

M-CORR 400 – UV STABLE POLYURETHANE TOPCOAT

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M-CORR 400 - UV Stable Polyurethane Topcoat is a solvent based, two pack coating. After cure, the material provides a high gloss and durable finish.

Typically used in conjunction with epoxy coating systems as a colour stable topcoat. It allows quick turnaround due to its rapid film hardening properties and offers excellent chemical and solvent resistance.

The material has good anti-corrosion properties and is designed for the long-term protection of steel and concrete structures against weathering and environmental corrosion.

Typical Uses

- External pipe protection
- Storage tank protection
- External pumps, valves protection
- Structural steel work

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 MFK.
- 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.

Surface Preparation - Concrete Existing Concrete

- If the concrete surface is contaminated, pressure wash using clean water.
- Once the concrete is dry lightly abrasive blast or scarify taking care not to expose the aggregate.
- Clean all dust and debris from the surface and take several moisture readings and prime with M-PRIME 100 Low Viscosity Epoxy Concrete Primer or M-PRIME 104 Damp Tolerant Concrete Primer dependent on the moisture readings obtained.
- Apply M-PRIME 100 or M-PRIME 104 at a target wet film of 150 microns, allow to cure before overcoating.
- For very porous surfaces a second coat of primer may be required.

New Concrete

- Allow new concrete to cure for a minimum of 21 days, lightly abrasive blast or scarify to remove any surface laitance.
- Clean all dust and debris from the surface and take several moisture readings and prime with M-PRIME 100 Low Viscosity Epoxy Concrete Primer or M-PRIME 104 Damp Tolerant Concrete Primer dependent on the moisture readings obtained.
- Apply M-PRIME 100 or M-PRIME 104 at a target wet film of 150 microns, allow to cure before overcoating.
- For very porous surfaces a second coat of primer may be required.









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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 100 microns.
- Once the basecoat has cured sufficiently, approximately 90 minutes at 20°C, apply a topcoat at a minimum wet film thickness of 100 microns.

Technical Information

Appearance	Base: Activator: Mixed:	Thin film liquid Clear liquid Available in a range of colours
Density	Base: Activator: Mixed:	1.514 1.035 1.418
Mixing Ratio	By weight: By volume:	5.5:1 4:1
Solids Content		55%
Sag Resistance	Nil at	150 microns









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Usable Life	10°C 20°C 30°C	60 minutes 30 minutes 15 minutes
Coverage	Applied as a 2-coat system to properly prepared surfaces. The material should be applied at a target thickness of 100 microns per coat with a theoretical coverage rate of 10m² per ltr per coat.	10m² per ltr per coat
Cure Times	20°C 30°C 40°C	90 minutes 45 minutes 22.5 minutes
Storage Life	Unopened and stored in dry conditions (15-30°C)	2 years
Adhesion	Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75-micron profile	195kg/ cm² (2770 psi)
	ASTM 412	
Salt Fog Resistance	Tested to ASTM B117	Unaffected at 10,000 hours
Corrosion Resistance	Tested to ASTM B117	5000 hours excellent
Humidity Resistance	Tested to BS3900 PART F2	Unaffected after 5000 hours











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UV Resistance	Shore D to ASTM G53	Unaffected at 10,000 hours
Heat Resistance	Suitable for use in immersed conditions at temperatures up to 50°C.	50°C
	Resistant to dry heat	130°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.

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









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