

MAXCHEM 400 – CHEMICAL RESISTANT HIGH TEMPERATURE COATING

Description	<p>MAXCHEM 400 – CHEMICAL RESISTANT HIGH TEMPERATURE COATING is a solvent free coating utilising the latest novolac polymer technology. The material provides excellent chemical protection for applications subject to high service temperatures. The products designed for the long-term protection of steel and concrete surfaces subject to constant chemical immersion at elevated temperatures.</p> <p>Once cured MAXCHEM 400 – CHEMICAL RESISTANT HIGH TEMPERATURE COATING is capable of withstanding temperatures up to 90°C continuous immersion, dependent on chemical contact but is proven to protect against 98% Sulphuric Acid at 75°C, 36% Hydrochloric Acid at 50°C and 40% Phosphoric Acid at 60°C</p> <p>The material is supplied as a 2-component product (PART A & PART B), that requires mixing before use, once mixed the product can be applied directly to prepared metal surfaces by brush, squeegee or plastic applicator.</p>
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Material Properties

Appearance	Base Activator Mixed	Grey/ red paste Amber fluid Grey/ red Liquid
Mixing Ratio	By Weight By Volume	5.34:1 4:1
Density	Base Activator Mixed	1.40 1.05 1.34
Solids Content		100%
Sag Resistance	Nil at	500 microns
Usable Life	10°C 20°C 30°C	50 minutes 30 minutes 15 minutes
Theoretical Coverage	Minimum wet film thickness of 250 microns per coat:	4 sqm/ltr

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Cure Times	Movement without load or immersion: Light loading: Full loading/water immersion: Chemical Contact: MAXCHEM 400 has been formulated to optimise resistance to mineral acids up to 90°C immersion temperature. Exposure to mineral acids will result in the formation of a black protective lacquer. In addition, after an initial curing period of at least 12 hours at 20°C, raising the cure temperature progressively to 60 – 80°C for up to 8 hours will result in improved mechanical, thermal and chemical resistance properties	6 Hours 12 hours 4 days 7 days
Storage Life	Unopened and stored in dry conditions (15-30°C)	5 years
Adhesion	Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75-micron profile	188kg/cm ² 2650psi
Compressive Strength	Tested to ASTM D 695	592kg/cm ² 8,400psi
Corrosion Resistance	Tested to ASTM B117	1000+ hours
Flexural Strength	Tested to ASTM D790	480kg/cm ² 6800ps
Hardness	Shore D to ASTM D2240	20°C/ 86 100°C/ 84 150°C/ 72
Heat Distortion	Tested to ASTM D648 at 264psi fibre stress	20°C Cure 62°C 100°C Cure 98°C 150°C Cure 112°C
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:	90°C 170°C

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Chemical Resistance	<p>MAXCHEM 400 (post-cured) offers excellent resistance to the following chemicals (when tested at the temperatures indicated)</p>	<p>98% Sulphuric Acid 75°C 75% Sulphuric Acid 90°C 50% Sulphuric Acid 90°C 25% Sulphuric Acid 90°C 36% Hydrochloric Acid 50°C 10% Hydrochloric Acid 50°C 40% Phosphoric Acid 60°C 20% Phosphoric Acid 60°C 5% Nitric Acid 50°C 40% Sodium hydroxide 90°C 20% Sodium Chloride 90°C</p> <p>In addition the product offers excellent resistance to the following chemicals when tested at 20°C:</p> <p>Ammonium hydroxide 30% Butanol 100% Benzene 100% Cyclohexane 100% Diethanolamine 100% Ethanol 100% Ethylene glycol 100% Hexane 100% Hexanol 100% Methyl diethanolamine 100% Propylene glycol 100% Octane 100% Xylene 100%</p>
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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.

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**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.