

MCO700 - TDS - REV1 - JAN 2019

MAXCOR 700 – HEAT ACTIVATED EPOXY NOVOLAC COATING

Description

MAXCORE 700 - HEAT ACTIVATED EPOXY NOVOLAC COATING is high performance, single pack epoxy novolac coating. The product once cured provides excellent chemical and corrosion resistance at elevated service temperatures.

To enable full material cure MAXCOR 700 HIGH TEMPERATURE COATING must be applied to hot metal surfaces at temperatures ranging between (100°C -150°C). Once cured the material is suitable for dry heat applications up to 220°C or immersed conditions up to 60°C.

Due to the application requirements of MAXCOR 700 HIGH TEMP COATING, the material is suited for applications to live pipework and process equipment running above the minimum 100°C. The material is particularly effective as a coating system to combat the negative effects of corrosion under insulation (CUI).

Material Properties

Appearance		Red thixotropic paste
Mixing Ratio	Single Pack	Ready to use
Density		1.44
Solids Content		100%
Sag Resistance	Nil at	Nil at 650 microns (100°) Nil at 500 microns (150°)



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Theoretical Coverage	MAXCOR 700 must be applied to surfaces above 100°C. The material should be applied in two coats at 400 microns WFT per coat. At this WFT the coating will have a theoretical coverage rate of 2.5m² per ltr, per coat	2.5 sqm/ltr
Cure Times	The product will only cure when applied to surfaces 100°C – 150°C	Touch dry 100°C 50 minutes 150°C 3 minutes Maximum overcoating time 100°C 3 hours 150°C 1 hours Fully cured 100°C 24 hours 150°C 4 hours
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	197kg/cm² 2800psi
Pull Off Adhesion	ASTM 4541 abrasive blasted mild steel with 75-micron profile. Immersed in water at 4°C for 120 hours, steel plate heated to 75°C, followed by dry exposure at 200°C for 120 hours	>21 MPa (3045 psi) Adhesive failure of adhesive
Corrosion Resistance	Tested to ASTM B117	5000 hours
Flexural Strength	Tested to ASTM D790	518kg/cm ² 7,350ps



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Hardness	Shore D to ASTM D2240	100°C 86 150°C 80 200°C 72
Inter-coat Adhesion with Thermoplastics	Application of Polypropylene at 150°C. Cross Hatch Adhesion	Pass
Cathodic Disbondment	Tested to ISO 21809-3 Annex F in 3% NaCl at 1500mV 23°C for 28 days. Average 4 mm Tested to ISO 21809-3 Annex F in 3% NaCl at 1500mV at 65°C for 28 days. Average 4 mm	Pass
Immersion Resistance	Tested by Eddy Current and Ultrasonic techniques after coated steel immersed in water at 4°C for 120 hours with the temperature of the steel at up to 75°C, followed by dry exposure at 200°C for 16.7 hours	No change in thickness of coating or any disbondment
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 220°C

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.