

MAXCERAM 500 – HIGH TEMPERATURE EPOXY CERAMIC COATING
Description

MAXCERAM 500 – HIGH TEMPERATURE EPOXY CERAMIC COATING is an erosion and corrosion resistant coating formulated using the latest solvent free epoxy novolac technology, enhanced further with the addition of several grades of high-quality silicone carbide ceramic fillers.

Designed principally for the long-term protection of fluid-flow and process equipment commonly found in the oil, gas and chemical industries

Once cured **MAXCERAM 500 – HIGH TEMPERATURE EPOXY CERAMIC COATING** provides a hard-wearing sacrificial barrier, protecting the parent metal from erosion, corrosion and wear at elevated temperatures up to 130°C continuous immersion dependant on the application

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, squeegee or plastic applicator.

Material Properties

Appearance	Base Activator Mixed	Dark grey paste Light grey paste Mid grey paste
Mixing Ratio	By Weight By Volume	5:1 3:1
Density	Base Activator Mixed	2.7 1.7 2.46
Volume Capacity		406cc/kg
Solids Content		100%
Slump Resistance	Nil at	2.0 cm
Usable Life	10°C 20°C 30°C	50-60 minutes 25-30 minutes 15-20 minutes

Coverage	1kg at a thickness of 1.0mm	0.4 m ²
Cure Times @ 20°C	Movement without load or immersion: Machining and light loading: Full loading: Immersion:	1.5 hours 2 hours 2 days 3 days
Storage Life	Unopened and stored in dry conditions (15-30°C)	5 years
Abrasion Resistance	Taber CS17 Wheels/1 Kg load	147mg loss/1000 cycles 0.06cc loss/1000 cycles
Adhesion	Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile	188kg/cm ² 2675psi
Compressive Strength	Tested to ASTM D 695	1089kg/ cm ² 15,500psi
Corrosion Resistance	Tested to ASTM B117	5000 hours
Flexural Strength	Tested to ASTM D790	703kg/cm ² 10,000psi)
Hardness	Shore D to ASTM D2240	100
Heat Distortion	Tested to ASTM D648 at 264psi fibre stress.	20°C Cure 57°C 100°C Cure 98°C
Heat Resistance	Suitable for long-term water immersion at temperatures up to: Intermittent contact with pressurised steam up to: Resistant to dry heat in excess of:	70°C 120°C 200°C Dependant on load
Chemical Resistance	The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media.	

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.