

### M-CERAMIC 402 – EPOXY CERAMIC WEAR COMPOUND – HIGH ABRASION

#### M-CERAMIC 402 – Epoxy Ceramic Wear Compound – High Abrasion

Is a Solvent free Epoxy Ceramic Wear Compound containing Silicone Carbide beads (1.5mm).

The product when cured is particularly suited for extreme fine particle and wet slurry wear environments, typically found in Cement Production, Quarrying and Steel industries.

The product can be applied up to 10mm in a single application without shrinking. Normal application method is by plastic applicator tool, trowel, and spatula.

#### Typical Uses

- Lining for Slurry Pumps
- Wear Resistant lining for Bins & Hoppers
- To Protect Fan Blades & Fan Housings
- Create Wear Plates
- Protect Pipe Elbows
- As a filler for lost Ceramic Wear Tiles

#### Application Guide

##### Surface Preparation - 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 - 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).

A: Tower Court, YO30  
4XL



T: 01904 809 773



E:  
info@maxkote.co.uk



W:  
www.maxkote.co.uk

- 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.

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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 10°C or less than 3°C above dew point.

### Mixing

Mixing full units or by part-mixing.

- If mixing the whole unit, please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface.
- Mix using the spatula provided until a uniform material free of any streakiness is achieved while ensuring no unmixed material is left on the spatula or the mixing surface.
- For part mixing, using a spatula place 5 equal measures from the base unit onto a clean plastic mixing surface.
- Clean the spatula thoroughly and then take 2 equal measures from the Activator unit and place alongside the Base measures.
- Mix as above.

Use all mixed material within 45 minutes at 20°C.

### Product Application

- The mixed material should be applied directly to the prepared metal surface at a minimum thickness of 6mm using a spatula or applicator tool.

### Technical Information

Appearance	Base	Grey paste
	Activator	Black paste
	Mixed	Mid grey paste
Mixing Ratio	By Weight	2.64:1
	By Volume	5:2
Density	Base	2.41
	Activator	2.29
	Mixed	2.38

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Volume Capacity		2100cc/5kg
Solids Content		100%
Sag Resistance	Nil at	20mm
Usable Life	10°C	100 minutes
	20°C	45 minutes
	30°C	25 minutes
Coverage	5kg at a nominal thickness of	0.35m <sup>2</sup> at 6mm 0.21m <sup>2</sup> at 10mm
Cure Times @ 20°C	Minimum overcoating time	6 hours
	Maximum overcoating time	12 hours
	Full Cure	4days
Storage Life	Unopened and stored in dry conditions (15-30°C)	5 years
Abrasion Resistance	Taber H10 Wheels/1 Kg load	29mm <sup>3</sup> loss/1000 cycles
Adhesion Pull-Off	Test to ASTM D4541 on abrasive blasted mild steel with 75- micron profile	258kg/ cm <sup>2</sup> (3645psi)
Adhesion Tensile Shear	Tested to ASTM D1002 on abrasive blasted mild steel with 75- micron profile	236kg/ cm <sup>2</sup> (3330psi)
Compressive Strength	Tested to ASTM D 695	790kg/cm <sup>2</sup> (11150psi)
Corrosion Resistance	Tested to ASTM B117	1000 hours
Flexural Strength	Tested to ASTM D790	415kg/cm <sup>2</sup> (5860psi)
Impact Resistance	Tested to ASTM D256	66J/m
Hardness	Shore D to ASTM D2240	89

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Heat Resistance	Full immersion resistance water/ hydrocarbon immersion to 50°C Dry heat resistance Tested to ASTM D2485	Pass (no blisters) Pass 150°C
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Chemical Resistance	The product resists attack by a wide variety of inorganic acids, alkalis, salts, and organic media.
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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.

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