

483 Micaceous Iron Oxide Epoxy Coating

Product Data/

Application Instructions

- Micaceous iron oxide pigmented epoxy coating, provide excellent impermeable properties.
- Economical long-term protection with only one coat.
- Excellent durability in marine atmosphere.
- Accepts urethane or acrylic topcoats where improved gloss and colour retention are required.

Typical Uses

Tank exteriors, structural steel, and piping in chemical plants, refineries, pulp and paper mills, offshore platforms, power plants and other structures exposed to severe weathering or salt spray.

Outstanding Characteristics

Khemix 483 is a high-build micaceous iron oxide polyamide epoxy with high solids content coupled with high percentage of micaceous iron oxide pigments, specially desined for industrial and marine use.

Chemical Resistant

Environment	Suitability of Khemix 483	
	Splash and Spillage	Fumes and Weathering
Acidic	Fair	Good
Alkaline	Excellent	Excellent
Solvents	Excellent	Excellent
Salt Solutions		
Acidic	Good	Very Good
Neutral	Excellent	Excellent
Alkaline	Excellent	Excellent
Water	Excellent	Excellent

*This chart is only a guide to shows typical resistance of **Khemix 483**. Your Khemix representative will help you evaluate your particular corrosion protection needs and make the correct recommendation for your specific requirements.*

*Typical System Using **Khemix 483***

	Primer	Topcoat
Concrete	No Primer normally required	Khemix 483
Steel inorganic prime*	Khemix 493	Khemix 483
Organic Primer	Khemix 468 Khemix Coating Series, Khemix Series.	Khemix 483

*Where improve gloss and colour retention is desired. **Khemix 483** may be top-coated with **Khemix 450** series urethane.*Over inorganic zinc primers, a mist coat may be required to prevent application bubbling.*

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Physical Data

Finish	Flat, metallic luctre
Colour	Silver grey / Dark grey
Applied over	Primed steel or concrete
Components	2
Curing mechamism	By solvent release and chemical reaction between components.
Volume solids	75% (ASTM D2697)
Dry film thickness per coat	75 - 150 microns
Coats	1 - 2
Calculated coverage at	
1 mil (25 μ)	30.0m ² / litre
5 mils (125 μ)	6.0m ² / litre
<i>Allow for application loss and surface irregularities</i>	
Application method	Airless or conventional spray
Pot life	6 hrs @ 25°C
Drying time (ASTM D1640)	At 25°C
Dry to touch	=> 2 hours @ 25°C
Dry through	=> 16 hours @ 25°C
Mixing ratio (by volume)	4 parts components A to 1 part components B
Temperature limit	
Continuous	200°F (93°C), dry
Intermittent	250°F (121°C), dry
Flash point (ASTM D3275)	Setaflash close cup mixed coating 84°F (29°C)
Thinner	Khemix 065 or RT – 103 Thinner
Cleaner	Khemix 12
Packaging	
Part A	16 litres in 20 litre pail
Part B	4 litres in 5 litres can
Shipping weight	31.3 - 33.5kg
Shelf life	24 months when stored indoors

Application Data

PRIMERS : Most inorganic zinc primers, such as **Khemix 493** and *Khemix Organic Primer*. No primer normally required for concrete.

TOPCOATS : Not normally necessary, however, where improved gloss and colour retention are required, use Khemix acrtlics or Khemix Polyurethanes. Contact Khemix technical service for further recommendations. Surface coating prior to painting must be free if dust and contaminations.

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Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.

Airless Spray : standard equipment such as Graco, Devilbiss, Nordsen-Bede, Speeflo, or others having a 28:1 or higher pump ratio and a fluid tip.

Conventional Spray : industrial equipment such as Devilbiss MBC or OGA spray gun. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in main air supply line are recommended.

Application Procedure

Khemix 483 is two components packaged in the proper proportions, which must be mixed together before use.

1. Flush equipment with **Khemix 012** before use.
2. Stir each component thoroughly, then add cure to resin and mix until uniformly blended to a workable consistency. Do not mix more material than will be used within 6 hours at 20 – 27°C. Pot life is shorten by higher temperatures.
3. Thinning normally not required, if thinning necessary for workability, add **Khemix 065** thinner up to 10% of **Khemix 483**.
4. Apply a heavy, wet coat in even, parallel passes overlapping each pass 50% to avoid bare areas, pinholes or holidays.
5. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
6. Application at 5 to 6.5 mils (125 to 167 um) wet film thickness will normally provide 4 to 6 mils (100 to 125 um) dry film.
7. Check thickness of dry coating with a nondestructive dry film thickness gauge such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.

Improper use and handling of this product can be hazardous to health and cause fire or explosion. Safety precautions with application instruction must be strictly followed during storage, handling, application and drying periods.

1. Numerical values are subject to normal manufacturing tolerances, colours and testing variances.
2. Allow for application losses and surface irregularities.
3. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.
4. Clean all equipment with **Khemix 012** immediately after use.
5. Keep cure container tightly closed since repeated exposure to moisture will cause gelatin. Moisture contaminated material is also subject to gassing on storage. Handle bulged containers with caution; lids may eject forcibly.
6. if a second coat of **Khemix 483** is required, 8 hours is the minimum recoat time at 25°C.

Khemix 483 may be applied by brush for small areas.

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Warranty

Khemix's products are warranted to be free of defects in material or workmanship. If a product does not conform with this Warranty, Buyer must notify Khemix within five days of discovery of the defect, but in no event later than one year after expiration of the applicable shelf life, whichever is shorter. Khemix's sole obligation under this Warranty shall be at its option, to credit buyer's account, or to supply replacement material or repair. Failure to notify Khemix of nonconforming goods under this warranty, within the time specified above, shall bar Buyer from recovery hereunder.

It is expressly understood that Khemix makes no other warranties concerning the goods, and the sole remedy of the Buyer and the sole liability of Khemix for product defect shall be as set forth above. No other warranties, express or implied, whether of merchantability or of fitness for any particular use shall apply. Khemix shall not be responsible for consequential damages.

Any recommendation or suggestion relating to the use of the products made by Khemix either in technical literature or in response to specific inquiry is given in good faith, but it is for Buyer to satisfy itself of the suitability of the goods for its own particular purpose and it will be deemed to have done so.