

# HYPOXY CERAMIC HARD COAT

PRODUCT: H-300 1LB/.454KG RED

H-350 1LB/.454KG BLUE H-360 1LB/.454KG YELLOW H-303 3LB/1.36KG RED H-353 3LB/1.36KG BLUE H-363 3LB/1.36KG YELLOW

**DESCRIPTION:** A two-component, high-performance, brushable ceramic coating used for protecting, sealing against moisture & providing effective, durable insulation coating on bus bars, Jumpers, Insulators etc. When mixed, it is a viscous liquid. Ceramic Hard Coat then cures to a hard, ceramic-like material with an Extremely smooth surface finish. The product has excellent self levelling features.

### **APPLICATIONS:**

OUTSTANDING WATER PERMEABILITY, HIGH DI ELECTRIC STRENGTH, GOOD THERMAL CONDUCTIVITY & EFFECTIVE EROSION / CORROSION RESISTANCE

# REPAIR DAMAGED COMPONENTS – PROTECTS NEW EQUIPMENTS

HYPOXY CERAMIC HARD COAT is High Performance Polymer Composite with ambient temperature curing features provides outstanding barrier against water / moisture permeation. This feature makes it most suitable for protective coating on electrical components prone to moisture absorption like Bus bar sprouts & Bushings, Switch yard mounted Epoxy moulded CT's / PT's etc. The cured coating of HYPOXY CERAMIC HARD COAT offers very high Di Electric resistance with excellent thermal conductivity. This features makes it most preferred option for Di Electric / Insulation coating on Pannel mounted Substation Bus bars / Open or Naked Bus bars in the switch yard or Flexible Jumpers.

Hypoxy Ceramic Hard Coat offers excellent self levelling properties which makes it most preferred solution to repair Porcelain / Ceramic Insulators against pitting defects due to aging.

The Excellent Corrosion & Abrasion / Erosion resistance properties make it a preferred choice for resurfacing and protecting all types of fluid flow components from aggressive erosion and corrosion damage.





#### **PHYSICAL PROPERTIES:**

Color -: Red or Blue or Yellow

Pot Life 1 lb. @ 24°C (75°F) -: 25 minutes
Viscosity -: Heavy Liquid.
Mixed Viscosity -: 32,000 cps
Cure Shrinkage -: 0.0007 in/in
Temperature Resistance -: 250°F (121°C)

Hardness (Shore, ASTM D 1706) -: 84D

Coverage -: 1 Lb covers 6.5 sq.ft

@ 15 mil thick

Coefficient of Thermal Expansion -: 75 X 10- 6 cm/cm/°C

Compression Strength

(ASTM D 695) -: 15,400 psi

Tensile Strength

(ASTM D 638) -: 4,800 psi Dielectric Strength -: 16 KV / mm

## **CHEMICAL RESISTANCE:**

Hydrochloric Acid 15% -: Very Good Sea Water -: Very Good Very Good Sulfuric Acid 20% -: Very Good Gasoline -: Very Good Water -: Very Good Ammonia -: Very Good Caustic Soda -: Very Good Xylene -: Benzene -: Poor Good Toluene -: Methylene Chloride -: Poor MEK -: Good Ethanol 50% -: Good



#### **SURFACE PREPRATION:**

Surfaces must be clean, dry, and preferably roughened for maximum adhesion. Proper surface preparation is critical to the long term performance of this product. The exact requirements for surface preparation vary with the severity of the application, expected service life, and the initial substrate condition.

Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75-125 microns ( 3 to 5 mils ). This is normally achieved by initial cleaning, followed by abrasive blasting to a cleanliness of white metal ( SA3 / SSPC-SP5) or Near White Metal (SA 2 ½ SSPC SP 10 ) followed by rinsing with an organic solvent which evaporates leaving no film residue. Grinding or machining to a rough surface profile followed by rinsing with solvent is acceptable although a subsequent lowering in adhesion may result.

#### **MIXING & APPLICATION:**

- 1. Mix the hardener thoroughly with a clean, one inch putty knife to disperse any pigment that may have settled. Scrape all the hardener into the resin container and mix thoroughly making sure all of the resin comes in contact with all of the hardener. Mix until the color is uniform with no light or dark streaks. Then mix for an additional minute. Total mixing time should be 4 minutes.
- 2. Mix ratio for lesser amounts: 5.7:1 by weight or 3.5:1 by volume.
- 3. Spread the material over the entire area as quickly as possible using a short stiff bristle brush, putty knife or plastic applicator blade.
- 4. Spread to a minimum thickness of 15 mils(0.4mm). Use a wet film thickness gauge to check. While spreading, take care to smooth out any heavy sags or drips.
- 5. Carefully inspect the first coat for pinholes, voids and holidays and repair before proceeding.
- 6. Mix and apply the second coat following the above instructions after the first coat has stiffened but is still tacky. At different temperatures, over coating time will be:

65°F (18°C) 2 – 4 hours 75°F (24°C) 1.5 – 3 hours 85°F (29°C) 1 – 2 hours

If these times are exceeded by less than 8 hours, the first coat should be lightly sanded then wiped with solvent and clean lint-free rags. If more than 8 hours, brush blast the coat at 60 to 80 psi (4-6 kg/sq.cm).

7. The second coat will be cured sufficiently for handling, grinding and trimming after:

18 hours at 65°F (18°C) 12 hours at 75°F (24°C) 10 hours at 85°F (29°C)

#### SAFETY:

Before using any product, review the appropriate Material Safety Data Sheet (MSDS). Follow standard confined space entry and work procedures, if appropriate.

#### **NON-WARRANTY:**

We can accept no responsibility or liability for lack of results because the storage, handling, and application of the compound is beyond our control.

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