



Advance Coat MIO

High Performance High Solid Epoxy Primer with Micaceous Iron Oxide (MIO)

Generic Type :

Two pack high solid epoxy polyamide amine system. reinforce by micaceous iron oxide (MIO).

Description :

Advance Coat MIO is a high solid epoxy MIO system use as anti corrosive primer for steel structure. It have excellent chemical, water and salt water and oil resistance with good adhesion properties. It have long coating interval and compatible with various subsequent and can be use for under water and expose area.

Typical Uses :

Can be used as protective anti corrosive primer for steel structure where long term protection against corrosion is require.

- Chemical Plant and factories
- Bridges
- Vessel
- Off shore structures

Physical Data :

Color : Grey , Brown
Flash Points : Base 32 °C ;Hardener - °C
Volume solid : 95 +/- 2%
Shelf Life @ 20°C/indoor : 24 months

Application Details

Mixing Ratio: Base:Hardener =7:3 (by wt)
Base:Hardener=3:2 (by Vol)

| Drying Time(at Dry Film Thickness 200µ) | Temperature | 10°C | 20°C | 30°C |
|---|-------------|--|--------|--------|
| | Surface Dry | | 10hr | 8hr |
| Hard Dry | | 24 hrs | 14 hrs | 10 hrs |
| Painting interval: | Minimum | 26 hrs | 16 hrs | 12 hrs |
| | Maximum | - | - | - |
| Pot life / working life | | 4 hrs | 3 hrs | 2 hrs |
| Theoretical coverage (at DFT 200µ) | | 0.21 L/m ² ; 290 g/m ² | | |
| Service temperature | | Max 60 °C (immersion) -60 to 150 °C (dry) | | |

Application Data :

Application Method : airless spray, roller, brush

Mixing Procedure : Power mix separately and then combine and power mix for at least two minutes or until homogeneous. When mixing partially, it is critical to follow to the mixing ratio as stated to ensure proper cure and film properties.

Curing schedule :

Complete curing – 7 days. Higher film thickness, insufficient ventilation, or lower temperature will require longer cure time. Excessive humidity or condensation on the surface can interfere with the cure cause discoloration and may result in a surface haze. Any haze must be removed by water washing before recoating. If the maximum recoat time have been exceeded, the surface need to sand or sweep blast prior to the application of additional coat.

This product requires the substrate temperature to be above the dew point (+ 3~5 °C). Condensation due to substrate temperatures below dew point can cause flash rust on metal and adhesion will be affected.

Application procedure :

Mix properly the two component before use.

- a) Flush equipment with thinner or AC Thinner A before use.
- b) Mix the base and hardener according to the stated ratio until homogeneous. Observe the pot life, at higher temperature, the pot life will be shorten.
- c) Thin only if necessary for workability.
- d) When applying by conventional spray, use adequate air pressure and volume for proper atomisation.
- e) Apply a wet coat in even parallel passes, overlap 50% to avoid holidays and pin hole.
- f) Clean up all equipment with thinner or AC thinner A immediately after use.
- g) Keep containers tightly close and store in proper storage area.

Condition of Application :

Use brush or roller with 1/8" nap . Apply at sufficient thickness and avoid repeating rolling to have good levelling.

Temperature : Minimum 5 °C
Humidity : Maximum 85 % R.H.
For Airless spray :-
Tip Size : Graco 621 or equivalent
Paint Output pressure : 150 – 180 kgf / cm²
Viscosity : 10 – 15 Poise
Thinning : 0 – 5 % by volume



Advance Coat MIO

High Performance High Solid Epoxy Primer with Micaceous Iron Oxide (MIO)

Surface Preparation

General : Surfaces must be clean and dry, all contaminants like dirt, dust, oil must be removed by appropriate method to ensure good adhesion

Steel : Surface preparation to St3 and above

Caution : All electrical equipment and installations should be made and properly grounded. In areas where explosion hazards exist, workmen should use non-ferrous tools, conductive and non-sparking shoes.

Clean-up : Use acetone or MIBK for cleaning. Observe safety precautions when using solvents. In case of spillage, absorb and dispose of the material and used container according to local required regulations or through a licensed waste collector.

Performance Data :

| Properties | Test Method | Evaluation |
|-----------------------|---------------|---|
| Adhesion | ASTM D4541 | 25 kgf/cm ² |
| Salt Spray | ASTM B117 | 2000hrs No blistering, rusting and rust creep from scribe |
| Fresh Water Immersion | ASTM D870 | 1 year/28 °C. No blistering, rusting and rust creep from scribe |
| Cyclic Salt Fog | ASTM D5894:05 | 2000hrs No blistering, rusting and rust creep from scribe |
| Humidity Test | ASTM D1735 | 2000hrs No blistering, rusting and rust creep from scribe |
| Impact Resistance | ASTM D2794 | Withstand 50ft/ibs |

Disclaimer

Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user. The products are delivered and any technical assistance is given subject to our GENERAL CONDITIONS OF SALE, DELIVERY AND SERVICE and, unless otherwise expressly agreed in writing, manufacturer and seller assume no liability in excess of that stated therein for results obtained, injury, direct or consequential damage incurred from the use as recommended above or otherwise.

Product data are subject to change without notice and automatically void two years from issue.

Safety Precaution and Clean-up

Safety : Read and follow the material safety data sheet (MSDS) before use. Employ normal safety precautions. Put on necessary personal protection equipment when handling and using this product.

Ventilation : When working in a confined workplace, thorough air ventilation must be used during and after application until the coating is cured. The ventilation system should be effective to prevent solvent vapour concentration from reaching the lower explosion limit for the product and to ensure exposure limits to personnel are below permissible exposure limits.

Limited Warranty

Whilst we endeavour to ensure that all advice we give about this product is correct and manufactured according to standard quality control systems, however we have no control over either the quality or condition of the substrate or many other factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of this product.