



Advance Coat Thermal Shade

High Performance Water-base epoxy Insulation coating.

Generic Type :

Two pack water-base epoxy insulation coating.

Description :

Advance Coat Thermal Shade is a water-base epoxy system use as insulation coating for roof , wall and steel structure. It have excellent heat conductivity, thermal reflection, chemical and water resistance with good adhesion properties .

Typical Uses :

Can be used as protective insulation coating for roof , exterior wall and steel structure like pipeline to reduce heat transfer and condensation.

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

Physical Data :

Color : Grey
Flash Points : Base - $^{\circ}\text{C}$; Hardener - $^{\circ}\text{C}$
Volume solid : 67 +/-2%
Shelf Life @ 20 $^{\circ}\text{C}$ /indoor : 24 months

Application Details

Mixing Ratio: Base:Hardener =3:7 (by wt)
Base:Hardener=1:3 (by Vol)

Drying Time(at Dry Film Thickness 5mm)	Temperature	10 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$	30 $^{\circ}\text{C}$
	Surface Dry		3 hr	2 hr
Hard Dry		26 hrs	14 hrs	10 hrs
Painting interval:	Minimum	26 hrs	14 hrs	10 hrs
	Maximum	14days	14days	14days
Pot life / working life		16 hrs	12 hrs	8 hrs

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 $^{\circ}\text{C}$). 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 water and follow by 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 $^{\circ}\text{C}$
Humidity : Maximum 85 % R.H.
For Airless spray :-
Tip Size : Graco 621 or equivalent
Paint Output pressure : 150 – 180 kgf / cm 2
Viscosity : 10 – 15 Poise
Thinning : 0 – 10 % by volume

Surface Preparation

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

Steel : Surface preparation to St3 and above
Surface profile : 45 – 100 microns



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Performance Data :

Properties	Test Method	Evaluation
Adhesion	ASTM D4541	300 psi
*Salt Spray	ASTM B117	1000hrs No blistering, rusting and rust creep from scribe

* base on full system

Safety Precaution and Clean-up

- Safety :** Read and follow the material safety data sheet (MSDS) before use. Employ normal safety precaution. Put on necessary personal protection equipment when handle and use this product.
- Ventilation :** when working in a confine 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 lower explosion limit for the product and to ensure exposure limit to the personnel to be below permissible exposure limit.
- Caution :** All electrical equipment and installations should be made and properly grounded. In area where explosion hazard exist, workmen should be used non-ferrous tools, conductive and non-sparkling shoes.
- Clean-up :** Use acetone or MIBK for cleaning. Observe safety precaution when use the solvents. In case of spillage, absorb and dispose the material and used container according to local required regulation or through licence waste collector.

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.

Limited Warranty

Whilst we endeavour to ensure that all advice we give about this product is correct and manufacture according to standard quality control system, 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.