

Product Description

A two components high performance inorganic zinc rich coating based on ethyl silicate as anti corrosive primer for severe corrosive environment.

Features

- Excellent durability in wide range of corrosive environment. Meet corrosive requirement of ISO12944-6 C5I or C5M as system.
- Easy to use – spray, brush , roller
- General purpose anti-corrosion inorganic zinc rich Primer.
- Suitable for most of the all steel structures.
- Excellent mechanical and physical properties for heavy duty application
- Heat Resistance upto 450 °C with silicone finish
- compatible to various subsequent coating

Typical Uses

Suitable for use as anti corrosion coating as barrier protection and active cathodic protection. Recommend to use for steel structures at coastal area such as refinery, mining facilities, power plant, bridges, buildings and steel installation. It has excellent mechanical and physical properties such as adhesion, impact and abrasion resistance which minimise mechanical damage during handling and transportation.

Physical Data

Color	:	Grey,
Flash Points	:	Base : 15 °C Powder : - °C
Volume Solid	:	60+/- 2%
VOC(as supplied)	:	500g/L
Shelf Life @25°C / indoor	:	12 months

Typical Thickness : 50 ~ 75µ dried film.

Drying Time(at Dry Film Thickness 75µ)	Temperature	10°C	20°C	30°C
	Surface Dry		30 min	20 min
Hard Dry		5 hrs	4.0 hrs	3.0 hrs
Painting interval:	Minimum	32 hrs	24 hrs	18 hrs
	Max. (self)	90 D	90 D	90D
Pot Life		10.0 hrs	7.0hrs	5.0hrs
Theoretical coverage (at DFT 50- 75µ)		0.083~0.125 L/m ² ; 12.0 ~ 8.0m ² /L		
Service temperature		-60 to 450°C (dry)		

Application Data

Mixing ratio : Base : Powder = 40 : 60 (by weight)
Application Method : airless spray, roller, brush

Mixing Procedure : Add part B into part A and power mix for at least two minutes or until homogeneous.

Drying schedule : Drying by solvent evaporation and chemical curing with moisture and humidity in the surrounding. Higher film thickness, insufficient ventilation, or lower temperature will require longer drying time. Excessive thickness may result mud cracking.

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.

Color Different : The paint use as primer may have slight color variance between batches. Similarly , the paint under sun light exposure may fade and oxidised.

Application Procedure

Mix properly the paint before use.

- Flush equipment with Hana thinner A before use.
- Mix the paint (part A and Part B accordingly to mixing ratio) thoroughly until homogeneous.
- Thin with Hana Thinner A only if necessary for workability.
- When applying by conventional spray, use adequate air pressure and volume for proper atomisation.
- Apply a wet coat in even parallel passes, overlap 50% to avoid holidays and pin hole.
- Constant stirring is recommended when using airless spray to prevent settling of heavy powder.
- Excessive thickness can prolong drying , sagging and mud cracking.
- Clean up all equipment with thinner immediately after use.
- 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 : Min 5 °C ; Max 50 °C
Humidity : Min : 50%, Max. 95 % R.H.

For Airless spray :-
Tip Size : Graco 419, 519 or equivalent
Paint Output : 9.8 MPa (g)
pressure
Viscosity : 10~12 sec by Ford Cup No 4
Thinning : 0 – 5 % by volume

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.

Abrasive blast clean
Abrasive blast clean to Sa 2.5 (ISO-8501) or SSPC-SP6. In case of hydro blasting or hydro jetting to remove existing coating, ginger rust should be removed and blow dry before application. Surface profile must be a minimum of 50 microns.

Shop primed steelwork
Weld seam and damaged area should be cleaned to a minimum St3 or SSPC-SP3. The shop primed steelwork should be repaired for any rust and free from any contaminant with suitable secondary surface preparation such as spot blast, sweeping or power tooling.

Performance Data

Properties	Test Method	Evaluation
Pull off Strength	ASTM D4541-02	> 20kgf /cm ² (2Mpa)
Salt Spray (5% NaCl solution)	ASTM B117	1500hrs, passed C5M, as system
Humidity (50 °C, 100% RH)	ASTM D1748	1000hrs, passed C5M, as system

* as 2 -3 coats 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 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 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 properly grounded. In areas where explosion hazard exists, workmen should be used non-ferrous tools, conductive shoes and non-sparking tools

Clean-up: Use Hana Paint epoxy thinner (Hana Thinner E) or hydrocarbon solvent for cleaning. Observe safety precaution when using the solvents. In case of spillage, absorb and dispose the material and used container according to local required regulation or through licensed 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.

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.