

### Product Description

A two components high build and hard epoxy coating reinforce with glass flake with excellent chemical resistance.

### Features

- Excellent durability in wide range of corrosive environment.
- Easy to use – spray, brush, roller
- Excellent chemical resistance for chemicals, petroleum products, water, salt water, alkalis and acids.
- Suitable for tank internal and external
- Excellent mechanical and physical properties for heavy duty application
- resistance to sea water and water, oil etc

### Typical Uses

Suitable for use as protective coating for petroleum and chemical tanks, fresh water tanks and pipeline internal & external wall. It has excellent chemical resistance to various chemicals, mechanical and physical properties such as adhesion, impact and abrasion resistance which minimise mechanical damage during handling and transportation.

### Physical Data

Color	:	White, Light Grey, cream, brown
Flash Points	:	Base : 13.0 °C Hardener : 15.5 °C
Volume Solid	:	65+/- 2%
VOC(as supplied)	:	371 g/L
Shelf Life @25°C / indoor	:	24 months

Typical Thickness : 100 ~ 200 μ dried film.

Drying Time(at Dry Film Thickness 125μ)	Temperature	10°C	20°C	30°C
	Surface Dry	2.0 hrs	1.0hrs	0.5 hrs
Hard Dry	12 hrs	6.0 hrs	4.5 hrs	
Painting interval:	Minimum	12 hrs	6 hrs	4.5 hrs
	Max. (self)	30 days	30 days	30days
Pot Life		7.0 hrs	5.0hrs	3.0hrs
Theoretical coverage (at DFT 100- 150μ)		0.153~0.308 L/m <sup>2</sup> ; 6.3 ~ 3.2 m <sup>2</sup> /L		
Service temperature		-60 to 150°C (dry)		

### Application Data

Mixing ratio : Base : hardener = 80 : 20 ( 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 cross linking. Higher film thickness, insufficient ventilation, or lower temperature will require longer drying time. Excessive humidity or condensation on the surface can interfere with the drying cause discoloration and may result in a surface haze. Any haze or contamination must be removed by water washing before recoating.

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 paint before use.

- Flush equipment with epoxy thinner before use.
- Mix the paint (part A and Part B accordingly to mixing ratio) thoroughly until homogeneous.
- Thin with Hana Thinner E 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.
- Excessive thickness can prolong drying and sagging.
- 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 : Maximum 85 % R.H.  
For Airless spray :-  
Tip Size : Graco 619, 621 or equivalent

Paint Output : 14.7 – 17.7 MPa (g)  
 pressure  
 Viscosity : 1.0 ~ 1.5 Pa.s  
 Thinning : 0 – 10 % 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 <sup>2</sup> ( 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
10% NaOH	ISO 2812-1	168 hrs, passed
10% H <sub>2</sub> SO <sub>4</sub>	ISO 2812-1	168 hours, passed
Mineral Spirit	ISO 2812-1	168 hours, passed
Fuel Oil	MIL-PRF-4556F	21 days, passed

### 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 made and properly grounded. In areas where explosion hazard exists, workmen should use non-ferrous tools, conductive and non-sparking shoes.

**Clean-up :** Use Hana Paint epoxy thinner (Hana Thinner E) or epoxy 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. 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.