ZINKY-13 INORGANIC ZINC RICH PRIMER 85

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Zinky-13 Inorganic Zinc Rich Primer 85 is a two pack solvent based coating based on ethyl silicate and zinc dust. It is suitable for use on steel a primer for high performance systems and as a single treatment coating for a variety of marine environment. It prevents corrosion and provides excellent resistance to weathering, abrasion, impact, heat and many solvents. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 1) and ISO 12944-5. The type of zinc dust used complies with ASTM D 520 (Type II).

INTENDED USE

Primer/topcoat systems based on Zinky-13 Inorganic Zinc Rich Primer 85 and specified topcoats are suitable for severe corrosive services such as offshore platforms, petrochemical complexes, gas and petroleum refineries, pulp and paper mills and corrosive chemical plants.

GENERAL PROPERTIES

Colour	: Grey
Gloss Level	: Matt
Volume Solids, %	: 62±2%
Specific Gravity	: 2.67 kg/l (Mixed)
Flash point	: Base: 22°C Mix: 23°C
VOC	: 501 g/L (mix, by calculation)
Typical Thickness	: 50～75 μm dry film
	: 80～120 μm wet film

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.
Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). Surface profile of 50 - 70um is recommended. If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

Damaged Area

Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). After the surface preparation, repair the damaged area using recommended zinc epoxy primer.

Zinky-13 should be applied over a surface that is dry and free from oil and other contaminations. It must be applied within the overcoating intervals specified (refer to application section for details).

Other Surfaces

The coating should not be used on other substrates.

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 5°C above 45°C. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air. To achieve the best film performance, curing temperature should be kept at 10°C above and humidity 65% above. When humidity is less than 65%, spray water to ensure curing.

APPLICATION GUIDE

Mixing Ratio : Base: Hardener 0.426 : 1 (by weight)
2.8 : 1 (by volume)
Add zinc powder to liquid under mix.

Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
4 Hrs

Theoretical Coverage : 8.27 m^2 / litre at 75µm DFT

Thinner : ZS-100 Thinner

APPLICATION METHOD

Brush application is suitable for stripe coating and very small areas. For best result, use conventional or airless spray. Care must be taken to achieve the specified dry film thickness. Avoid mud cracking.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.023"
Pressure at nozzle : 120 – 150 kg/cm2

Typical Thickness : 50～75 µm dry film
: 80～120 µm wet film

Drying Time :

Substrate Temperature	: 25°C	40°C
Surface Dry	: 10min	5min
Through Dry	: 2.0hrs	1.0hr
Cured *	: 4.5hrs	2.0hrs
Dry to recoat (min)	: 4.5hrs	2.0hrs
Dry to recoat (max)**	: Extended	

* curing depends on humidity condition
**all zinc salts should be removed prior to overcoating

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.
** Where an "extended" overcoating time is stated, consult Nippon Paint Protective Coatings for recommended surface preparation to achieve optimal intercoat adhesion.

RECOMMENDED PAINTING SYSTEM

The following Intermediate/Topcoats are recommended for Zinky-13:

Intermediate

- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE AL 80
- Hi-Pon 20-04 STE MIO 80
- Hi-Pon 30-01 Epoxy Midcoat 70
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80
- Hi-Pon 30-04 Epoxy MIO 70

Topcoat

- Hi-Pon 40-02 Epoxy Topcoat
- Hi-Pon 40-04 Epoxy Topcoat
- Hi-Pon 50-01 Polyurethane Topcoat
- Hi-Floro 6738 Fluorocarbon Top Coat

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

PACKAGING

Unit	Base		Hardener	
	Weight	Container Size	Weight	Container Size
14.3KG	4.3KG	5L	10KG	10L

STORAGE

Shelf life : Part A: 6 months (25°C)
Part B: 12 months (25°C)

Subject to re-inspection thereafter. Higher temperature during storage may reduce the shelf life and may lead to gelling in the tin.

Store in tightly closed container in a dry, cool and well ventilated space, keep away from sources of heat and ignition.

SAFETY PRECAUTION

- This product is intended for use of professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.
- Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eye should be well flush with water and seek for medical attention immediately upon contact with this product.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.
- If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

DISCLAIMER

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