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 - 70µm 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.

Version 004 Issue date: 30/04/17 Page 1 of 4
ZINKY-13 INORGANIC ZINC RICH PRIMER 85

TECHNICAL DATA SHEET

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 m²/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.

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**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Base</th>
<th>Hardener</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weight</td>
<td>Container Size</td>
</tr>
<tr>
<td>14.3KG</td>
<td>4.3KG</td>
<td>5L</td>
</tr>
</tbody>
</table>

**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.

- 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.

The information in this data sheet is given to the best of Nippon Paint's knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user's responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not within Nippon Paint's control. Therefore no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint’s policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user’s responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.