**PRODUCT DESCRIPTION**

Zinky-21 Epoxy Zinc Rich Primer 77 is a two-component, fast dry, zinc rich primer with hard, abrasion and weathering resistant film, providing good corrosion resistance. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 2). The type of zinc dust used complies with ASTM D 520 (Type II).

**INTENDED USE**

As long term protection of high performance primer, widely used for bridges, petrochemicals, power generations, offshore facilities, port machineries and hydro facilities etc under medium or heavy corrosion environment.

**GENERAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Gloss Level</td>
<td>Matt</td>
</tr>
<tr>
<td>Volume Solids, %</td>
<td>58±2%</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.27 kg/l (Mixed)</td>
</tr>
<tr>
<td>VOC</td>
<td>432 g/L (mix, by calculation)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Base: 23.5°C     Hardener: 25°C Mix: 23.5°C</td>
</tr>
<tr>
<td>Typical Thickness</td>
<td>50~80 µm dry film</td>
</tr>
<tr>
<td></td>
<td>85~140 µm wet film</td>
</tr>
</tbody>
</table>

**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.

**Shop Primer Surface**

This product is suitable for application to the unweathered steelwork freshly coated with Zinc silicate shop primers. If the Zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting will be necessary. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be blast cleaned to Sa 2½ (ISO 8501-1:2007).

**Damaged Area**
Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, the application of Zinky-21 can be performed.

Zinky-21 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 may be used on other substrates. Please contact your local Nippon Paint office for more information.

Avoid paint application when the temperature is below 10°C above 45°C and relative humidity is over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.

Mixing Ratio
Base: Hardener 9 : 1 (by weight)
2.9 : 1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life
25°C
6 Hrs

Theoretical Coverage
7.7 m²/litre at 75μm DFT

Thinner
Hi-Pon Epoxy Thinner

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

Airless Spray
Tip Size: 0.015” – 0.021”
Pressure at nozzle: 120 – 150 kg/cm²

Typical Thickness
50~80 μm dry film
85~140 μm wet film

Drying Time
Substrate Temperature: 10°C 25°C 40°C
Surface Dry: 1.0hrs 0.3hrs 0.2hrs
Through Dry: 8hrs 3hrs 2hrs
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.

The following Intermediate/Topcoats are recommended for Zinky-21:

**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>Vol</td>
<td>Container Size</td>
<td>Vol</td>
</tr>
<tr>
<td>10L</td>
<td>7.4L</td>
<td>14L</td>
</tr>
</tbody>
</table>

### Storage

**Shelf life**:
- Part A: 12 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**

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.