HI-VINYL 1201

ZINC PHOSPHATE PRIMER

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Vinyl 1201 Zinc Phosphate Primer is a one-pack, lead and chromate free vinyl copolymer primer pigmented with zinc phosphate. It is fast drying and has excellent adhesion and corrosion protection when applied to properly prepared ferrous and non-ferrous substrates.

INTENDED USE

It is designed for use as a primer on the exterior of steel structures exposed to moderate to severe corrosive environments.

GENERAL PROPERTIES

Colour	: Grey & Yellow Oxide
Gloss Level	: Matt
Volume Solid	: 20 ± 2 %
Specific Gravity	: 1.02 ± 0.03 kg/l
Flash Point	: -3 °C
VOC	: 665 g/L (EPA Method 24)
Typical Thickness	: 50 – 80 µm dry film 250 – 400 µm wet film

Remarks

Multiple spray pass to achieve 80 – 120 µm DFT per coat

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

For optimum performance, abrasive blast clean to Sa 2½ (ISO 8501-1) or SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). 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) or SSPC-SP10. When abrasive blasting is not possible, mechanical cleaning to St3 (ISO 8501-1) or SSPC-SP3 is acceptable. Hi-Vinyl 1201 should be applied over a surface that is dry and free from all contamination.

Other Surfaces

The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.

CONDITION DURING APPLICATION

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

APPLICATION GUIDE

Mixing Ratio : Product should be mixed thoroughly before use with a mechanical agitator

Theoretical Coverage : 4.0 m^2/litre at 50 µm DFT
2.5 m^2/litre at 80 µm DFT

Thinner : Hi-Pon Vinyl Ester Thinner

Cleaner : Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Conventional air and airless spray are recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.011" – 0.018"
Pressure at nozzle : 120 – 150 bar

Drying Time

: Substrate Temperature	25 °C	40 °C
Surface Dry	12 mins	6 mins
Through Dry	55 mins	35 mins
Dry to Overcoat (min)	2.5 hr	1 hr
Dry to Overcoat (max)	1 month	1 month

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.

HEAT RESISTANCE

Dry, Atmospheric

- Continuous : 70 °C
- Minimum : - 20 °C
- Intermittent : 100 °C

Intermittent temperature duration – 1 hour maximum

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures. Heat resistance is influenced

by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

RECOMMENDED COATING SYSTEM

The following coating system is recommended for Hi-Vinyl 1201 Zinc Phosphate Primer:

Top Coat:

- Hi-Alkyd 1501 Alkyd Top Coat
- Hi-Acryl 1901 Acrylic Top Coat
- Hi-Acryl 1902 Acrylic 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	Volume	Container Size
5 L	5 L	5 L
20 L	20 L	20 L

STORAGE

Shelf Life : 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. Frequent temperature cycles may also shorten the shelf life.

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.