

APCODUR EPOXY ZINC RICH PRIMER-ZR685

Epoxy Zinc Rich

PRODUCT DESCRIPTION

This is a two component polyamide cured zinc rich epoxy coating. It is a high solids, high zinc dust containing product. It conforms to the compositional requirements of SSPC paint 20, level 1 and ISO 12944-5. It provides very good corrosion protection as part of a complete coating system.

FEATURES AND RECOMMENDED USE

- Recommended as a system primer for highly aggressive atmospheric environments.
- Good corrosion resistance in marine and saline atmosphere
- Suitable for carbon steel, repair of inorganic zinc silicate coating and damaged galvanised steel substrates.
- This primer is completely compatible with almost any type of paint.

TECHNICAL DATA

Colour	Grey
Gloss	Matt
Volume Solids	Approx. 62%
Recommended DFT / Coat	40-75 microns
Theoretical Coverage Capacity	16 sq.mtr/ ltr @ 40 microns DFT 9 sq.mtr/ ltr @ 75 microns DFT
Drying time at 30°C	
Surface Dry	: 30minutes
Hard Dry	: 12 hours
Full Cure	: 7 days
Over coating interval at 30°C	Min. : 12 hours Max. : Unlimited, provided surface is dry and clean from all contamination

The data given is for guideline only. The physical values are subject to normal manufacturing tolerances, colour and testing variances. The volume solids indicated are as per ASTM D 2697 air drying method.

The actual drying time/ overcoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, temperature etc. The information provided above is at 30° C and 65% relative humidity.

DIRECTION FOR USE

Surface Preparation

General

- Surfaces must be dry, clean and free from contaminants
- Ensure removal of dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. Oil and grease should be removed as per SSPC-SP1 solvent cleaning.
- Surface should be checked and treated in accordance with ISO 8504 prior to priming.

Blast Cleaning

- Steel, abrasive blast clean to min. Sa 2¹/₂ (ISO 8501-1: 2007) or SSPC-SP 10. In case oxidation has occurred between blasting and application of Apcodur Epoxy Zinc Rich Primer; the surface should be re-blasted.
- A blasting profile of (Rz) 40-50 microns is recommended.
- Substrate temperature should be at least 3°C above dew point but not above 50°C.
- Relative humidity should be below 85%
- Good ventilation is required in confined areas to ensure proper curing



MIXING

- If settling is observed in the drum, loosen the settled material with the help of hand stirrer followed by power driven stirrer for quick homogenous mixing. Continuous stirring is required during the application to avoid settling.
- Mix hardener gradually into the base under continuous stirring as per the mixing ratio. Once the unit has been mixed, it should be consumed within the working pot life. In case of part mixing (which should be avoided), close the lids of containers tightly to avoid contact with atmospheric moisture.
- Thinner should be added after mixing the components and post the induction time. Addition of excessive thinner will lead to reduced sag resistance.

Mixing Ratio	Base: Hardener
(By volume)	3 : 1
Induction Time	30 minutes
Pot life at 30°C	4 hours

APPLICATION

Air Spray:

Recommended thinner	: Apcodur Epoxy Thinner/Thinner
T 141 Volume of thinner	: 5 - 10%
Nozzle orifice	: 1.5 – 3.0 mm
Nozzle Pressure	: 0.3 – 0.4 MPa (= approx. 3 – 4 atm; 43 – 47 p.s.i.)
Cleaning Thinner	: Apcodur Epoxy Thinner/Thinner T 141

Airless Spray:

Recommended thinner	: Apcodur Epoxy Thinner/Thinner
T 141 Volume of thinner	: 0 - 5%
Nozzle orifice	: 0.46 - 0.64 mm (18 – 25 Thou)
Nozzle Pressure	: 15 MPa (= approx. 150 atm; 2100 p.s.i.)
Cleaning Thinner	: Apcodur Epoxy Thinner/Thinner T 141

Brush / Roller

Suitable for stripe coating and small areas.

Recommended thinner	: Apcodur Epoxy Thinner/Thinner
T 141 Volume of thinner	: 0 - 5%

CLEANING

- Do not allow the product to remain in hoses, gun or spray equipment. Clean all equipment immediately after use with Thinner T 141. It is recommended to periodically flush out spray equipment during the course of the working day. The frequency of cleaning will depend on amount sprayed, temperature and time gap.
- All surplus material and empty containers should be disposed of in accordance with appropriate regional legislation.

PRODUCT CHARACTERISTICS

- Zinc rich coatings are porous and hence pinholes may occur in the subsequent coat due to solvent popping. To minimize pinholes, apply a mist coat as the first pass of the subsequent coat, let the entrapped air escape and then apply full coat.
- Surfaces primed with Zinc rich primers without suitable topcoat when exposed to atmosphere forms zinc corrosion products which is also called as white rust. The extent of white rust formation will depend on the period of exposure of the zinc rich primer and the nature of the surrounding environment. Prior to application of the subsequent coats, it is necessary to ensure removal of the white rust. Use fresh water wash with nylon scrubber to remove white rust.
- It is recommended to achieve the required DFT of zinc rich primer in one coat application
- Should not be over-coated with self and coatings containing saponifiable matter

PACK SIZE	12 ltr (Base: 1 × 9 ltrs & Hardener: 1 × 3 ltrs)
STORAGE	Shelf Life: Atleast 6 months @ 30°C for original unopened pack, subject to inspection thereafter. Store in a cool, dry place and in accordance with local regulations
REGULATORY INFORMATION	Flash Point Base : Not less than 24°C Hardener : Not less than 24°C
	VOC Approx. 440 ± 30 gm/ltr (depending on shades) as per USA-EPA Method 24
	Product Weight Approx. 2.18 ± 0.05 kg/ ltr (depending on shades)

SAFETY INFORMATION

- As a general safety measure, inhalation of solvent vapours or paint mist and contact of liquid paint with skin & eyes, should be avoided. Forced ventilation should be provided when applying paint in confined spaces or stagnant air.
Even when ventilation is provided, respiratory, skin and eye protection are always recommended when spraying paint.
- Please refer our Material Safety Data Sheet prior to using the product.

Disclaimer:

To the best of our knowledge the information provided herein are true and accurate at the date of issuance. Since we have no control over the quality or condition of the substrate or the various factors affecting the use and application of the product, we do not accept any responsibility or liability arising out of use of the product.

The company reserves the right to modify data contained herein without prior notice. Any change in data would normally be followed by issue of a new datasheet. The user should check with the nearest sales office of the company and confirm the validity of the information, prior to using the product.

* APCODUR is a Trademark of Asian Paints Ltd.