

Zinc Phosphate Epoxy Primer

Description

Happilac Zinc Phosphate Epoxy Primer is a two component with high performance and high build epoxy primer exhibiting excellent adhesion and resistance against solvent, water, mild acids, bases and wide range of chemicals. The zinc phosphate ensures high protection against early rust formation and chemical corrosion. It is based on high molecular weight epoxy resin and anticorrosive pigments. It has been designed to provide fast drying. It provides economical and hard wearing surfaces at low temperature for a wide range of application. Epoxy Primer may also be used to seal prepared, aged coating prior to repainting.

Recommended For / Typical Use

Happilac Zinc Phosphate Epoxy Primer is suitable for steel, alloy, structural steel works, chemical plant pipelines, metals, abattoirs, dairies and automotive parts. Suitable for structural steel and piping to be exposed to corrosive environments. Recommended for power plants, airports, buildings, refineries and mining equipment.

Features

- Provides best adhesion between metal and top coats
- Excellent wear resistance
- Excellent chemical resistance
- Minimizes maintenance costs
- Can be used below the water lines
- Excellent adhesion to variety of surfaces
- Easy application

Product Information	
General Properties	Coating Properties
Specific Gravity	
Component A	1.55±0.05
Component B	0.930±0.05
Mixing ratio	3:1 (Vol/Vol)
Pot Life	Approx. 1-1.5 hours @ 30°C
Thinner	Epoxy Thinner
Flash Point	60°C
Covering	10-12m ² /liter/Coat
Recommended WFT	70-80 micron/Coat
Recommended DFT	50-60 micron/Coat
Drying/Curing @ 30°C	
Tack Free	1-1.5 Hours
Recoating time	6-12 Hours
Cure time	5-7 Days
	Flexibility Good Water resistance Excellent Abrasion resistance Good Corrosion resistance very good Shelf life 2 years Temperature resistance up to 100°C Chemical resistance Good
	Surface staining may result from exposure to some aggressive chemicals. Good housekeeping practice requires that spills be quickly removed and washed away.

Limitations

- It is not recommended for surfaces known to suffer from rising damp.
- Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at an average DFT range for the product.

Colors

Grey, Buff, Red

Surface Preparation

Carbon Steel:

Ensure that the surface is free from oil and grease. Abrasive blasts clean to a class 2 near white metal finish. Surface preparation guidelines cannot cover all site or field contingencies and it is always recommended that on spot adhesion test be performed as part of the standard Quality Assurance audit for the project.

Metals:

In case of mild conditions of application, remove the previous coat with a mechanical tool, wire mesh or a mild sweep blast is to be done. In case of detailed surface preparation is warranted, remove all wax, oil and grease by solvent cleaning in accordance with the guidelines given by SSPC-SP1. Where necessary remove weld spatter and round off all rough weld seams and sharp edges to a smooth surface. Ideally abrasive blast clean to minimum standard of Sa 2-1/2 Swedish standard SIS 05 5900 or ISO 8501-1:1988. Any surface defects revealed by blast cleaning should be ground, filled or treated in a suitable manner. After blasting, remove dust from the surface. The surface to be coated must be clean and dry with Happilac Zinc Phosphate Epoxy Primer.

Aluminum:

Degrease and abrade with Happilac Epoxy Thinner. Apply Happilac Zinc Phosphate Epoxy Primer. Immediately follow with the top coat. Exclusions for successful application include perpetually wet surfaces and also large cavities on metal surfaces.

Application

Mix Component A & Component B in the recommended ratio. Thorough care should be taken that excess air bubbles should not form. Give an indication period of 10-15 minutes prior to application. A normal brush or a roller may be used for difficult shapes or touch ups, however additional coats may be required to achieve the recommended film thickness. The method of application is recommended for stripe coating welds, edges, rivets etc.

Allow the coating to cure for 5-7 days prior to subjecting chemical exposure.

Application Guideline	Air Spray	Air Less Spray	Brush/Spray
Type of thinner	Happilac Epoxy Thinner	Happilac Epoxy Thinner	Happilac Epoxy Thinner
Volume of thinner	As per requirement	As per requirement	10-15%
Nozzle Orifice	1.3-2.0mm	00.15-20mm
Nozzle Pressure	3-4 Bars	140-160 Bars

Recommended Film Thickness / Coat

Dry film thickness	2.4 mils (60 µm) - 10 mils (250 µm)
Wet film thickness	3 mils (85 µm) - 13 mils (340 µm)
Theoretical spreading rate	490 ft ² /gal (12 m ² /l) - 120 ft ² /gal (3 m ² /l)

Product mixing ratio (by volume)

HZP Epoxy Primer Base (Comp-A)	3 part(s)
HZP Epoxy Primer Hardener (Comp-B)	1 part(s)

Packing and Storage

Happilac Zinc Phosphate Epoxy Primer is available in 4.00 liters gallon and 20 liters packing containing base and hardener in correct proportions.

Sr #	Product	Volume (L)	Container Size (L)
1	Happilac ZP Epoxy Primer Base (Comp-A)	3	4
	Happilac ZP Epoxy Primer Hardener (Comp-B)	1	1
2	Happilac ZP Epoxy Primer Base (Comp-A)	15	20
	Happilac ZP Epoxy Primer Hardener (Comp-B)	5	5

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care and protect from frosting.

Health and Safety Notes

- When applying paint, wear appropriate eye protection.
- In case of eye contact with product, rinse with plenty of water for at least 10 minutes.
- Don't breathe spray mist or dust.
- Ensure proper ventilation when applying paint.
- If swallowed, it may cause serious damage.
- When empty, don't use its container for edible storage.
- Place out of reach of the children.
- Pregnant women are advised to avoid breathing of paint mist or spray.
- In case of any emergency, undergo medical supervision as soon as possible.

WARNING: Scraping/sanding off previously painted surfaces may release lead dust or fumes. Lead is highly toxic; take protective measures thoroughly when rubbing off the old surfaces.