

IriPrime555[™]

General Description

This is a two-pack, zinc content epoxy primer that is specially formulated to protect steel structures against severe corrosion in marine and industrial conditions. IriPrime555[™] is recommended for surfaces that prepared with high/ultra-high-pressure hydro blasting. It tolerates Sa2 and St3 prepared surfaces.

Product Technical Information

- Solids by volume 55 ±1 %
- Density 2.30 ±0.05 Kg /Lit
- Flashpoint >20°C
- Colors/Finish Grey /Matt
- Mixing ratio Base to Hardener 89 to 11
- Suitable Thinner/Cleaner IriThin33
- Induction Time 15 minutes

Note: Mix the zinc paste before adding the binder. Step-by-step add the binder and stir the mixture to achieve a homogeneous product. To avoid blockage of the spray, remove large particles by filtration of the mixture. During application, the mixture should be stirred to ensure the material remain uniformly blended. Always add thinner after mixing the components.

- Pot Life

@ 10°C	@ 23°C	@ 30°C	@ 40°C
10 hours	6 hours	4 hours	2 hours

Drying & Recoating Times

Temperature	To touch	To handle	To recoat		Full cure
			Minimum	Maximum	
@ 10°C	90 minutes	12 hours	20 hours	90 days	10 days
@ 23°C	45 minutes	6 hours	10 hours	90 days	7 days
@ 30°C	30 minutes	4 hours	8 hours	90 days	5 days
@ 40°C	20 minutes	3 hours	6 hours	60 days	4 days

Note: Drying times are dependent on air and surface temperatures as well as film thickness, ventilation, and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures, not simply air temperatures, higher surface temperatures shorten the maximum recoat window.

The surface should be dry and free from contaminants prior to overcoating. The best inter-coat adhesion is achieved when the subsequent coat is applied before the preceding coat is fully cured. After prolonged exposure times it may be necessary to roughen the surface to ensure inter-coat adhesion. When in doubt, consult your nearest **Darya Tamin** office.

Application

- **Suitable methods**

Air Spray	Airless Spray	Brush/Roller
<ul style="list-style-type: none"> • Nozzle pressure: 4-6 bar • Nozzle size: 1.2-2.0 mm • The volume of thinner: 0-10% 	<ul style="list-style-type: none"> • Nozzle pressure: 120-200 bar • Nozzle size: 0.44-0.55 mm • Spray angle: 40-80 degrees • The volume of thinner: 0-5 % 	<ul style="list-style-type: none"> • Brush is recommended for strip coating & touch up. • The volume of thinner: 0-10%

- **Recommended thickness**

	Dry film thickness(µm)	Wet film thickness(µm)	Theoretical spreading rate (m ² /l)
Acceptable range	50-80	90-145	6.9-11.0
Recommended	70	130	7.9

Surface Preparation

Surfaces should be free of oil, grease, salt or other contaminants. Remove all wax, silicone, powdery or scaling rust and then clean the surface by fresh water washing.

Steel: Remove weld spatter and smooth weld seams and sharp edges as applicable. Abrasive blasting: min. Sa 2½ – ISO 8501:1. Power tool cleaning: min. ISO-St3. Please note that better surface preparation always results in longer lifetime expectations. Apply IriPrime555™ as soon as possible after surface preparation to prevent any contamination.

Repairing Inorganic Zinc Primer: The surface should be clean, dry, and free of all contaminations and loose paint. Areas should be power tool cleaned according to ISO-St3 or blast cleaned according to ISO-Sa2. Feather edges of the intact existing coating.

Repair: Damaged or corroded area should be power tool cleaned to ISO-St3 or blast cleaned to ISO-Sa2 or better and feathering edges of the intact coating. Thoroughly remove dust or abrasive residue before touch-up.

Application Condition

The temperature of the substrate should be at least 3°C above the dew point of the air. Temperature and relative humidity should be measured in the vicinity of the substrate. The maximum recommended surface temperature is approx. 40°C and relative humidity during application and curing should not exceed 80% . When applying the paint in confined spaces, provide adequate ventilation during application and drying. The temperature of the mixed paint should be at least 10°C.



Storage, Handling & Shelf Life

Generally, keep the paint containers in dry and cool (5-35 °C) place and away from heat or open flame. Paint containers must be kept tightly closed in the well-ventilated area and handled with care. This product's shelf life @ 23 °C is 12 months.

Environmental, Health & Safety Note

Read the material safety data sheet (MSDS) of the product before use and pay attention to safety signs attached to the product can. This product is flammable so keep away from heat and open flame.

Avoid skin and eyes by wearing overall, glove, goggles, and a suitable mask. Spillage on the skin should immediately be removed with a suitable cleanser, soap, and water. Eyes should be well flushed with water, and medical attention sought immediately. Don't discard the product on planets, sea, river and drinking water sources.

Keep out of reach of children.

Disclaimer

The information in this document is given to the best of IRIS's knowledge based on professional tests by our experts. However other factors that are affecting the use and application of this product are out of IRIS's responsibility.

For more information contact with Darya Tamin.