

# IriShop<sup>тм</sup>

## **General Description**

This is a two-pack ethyl silicate shop primer that contains zinc powder to protect steel structures against the corrosion. IriShop<sup>TM</sup> is recommended for short to medium-term protection of abrasive blast cleaned steel plates and other steel structures during the storage, fabrication, and construction periods. IriShop<sup>TM</sup> especially is suited, where welding and gas-cutting properties are important. It has excellent resistance to weathering, oil, organic solvents, and heat.

## **Product Technical Information**

- Solids by volume  $35 \pm 1\%$
- Density  $1.35 \pm 0.05 \text{ Kg/Lit}$
- Flashpoint >8°C
- Colors/Finish Green, Red Brown/Matt
- Mixing ratio Component A to Component B 55 to 45 (by volume)
- Suitable Thinner/Cleaner IriThin66

**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	8 hours	6 hours	4 hours

## **Drying & Recoating Times**

Temperature	To touch	To handle	To recoat	
1			Minimum	Maximum
@ 23°C & 70% RH	10 minutes	2 hours	3 days	Indefinite
@ 30°C & 70% RH	5 minutes	1 hour	2 days	Indefinite

**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. When recoating with other products, the coating should be dry and free from zinc salts and other contaminants. Apply a mist coat of the subsequent product first. When in doubt, consult your nearest **Darya Tamin** office.



## Application

#### • Suitable methods

Air Spray	Airless Spray	Brush/Roller
<ul> <li>Nozzle pressure: 4-5 bar</li> <li>Nozzle size: 1.8-2.2 mm</li> <li>The volume of thinner: 0-10%</li> </ul>	<ul> <li>Nozzle pressure: 120-150 bar</li> <li>Nozzle size: 0.53-0.64 mm</li> <li>Spray angle: 40-80 degrees</li> <li>The volume of thinner: 0-3 %</li> </ul>	• Not Recommended

#### Recommended thickness

	Dry film thickness(µm)	Wet film thickness(µm)	Theoretical spreading rate (m²/l)
Acceptable range	20-30	60-85	11.7-17.5
Recommended	25	70	14

#### **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  $2\frac{1}{2}$  – ISO 8501:1. Apply IriShop<sup>TM</sup> after the steel has been blasted and the quality of preparation has been approved.

**Note:** For newbuilt structures, it is recommended to apply the shop primer by using automatic blasting /spraying equipment. The steelwork should be protected from rain or condensation during the application and initial drying stages of shop primer.

## **Application Condition**

The temperature of the substrate should be at least  $3^{\circ}$ 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.

At relative humidity below 55%, curing is retarded. Zinc silicate paints, in general, require moisture for curing. At low humidity, the curing will be improved by gently sprinkling fresh water over the paint film, and/or by artificial humidification of the surrounding atmosphere.For this shopprimer, the indicated dry film thickness means the thickness measured on a smooth test panel. Higher roughness may require upwards adjustment of the dry film thickness and correspondingly reduce the theoretical spreading rate.



## 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 6 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.