

**CODE: EP-253**

**PRODUCT NAME:**

**Epoxy Mastic**

**DESCRIPTION:**

EP-253 is a two components, high builds, epoxy mastic. This is self-priming and has exceptional adhesion even over tightly adhering rust. It also has good flexibility and impact resistance, plus good wetting properties, almost eliminating undercutting at damaged areas. It penetrates and encapsulates rust and provides good protection over clean, base metal.

EP-253 may be used as a high solid primer, an intermediate coat or single coat interior application. Minimum two coats of this coat are used for immersion fresh or salt waters. It is also suitable for storage tanks, offshore rigs, bar joists, piping and etc.

**TECHNICAL DATA:**

Binder	Epoxy resin
Pigment	Titanium dioxide and Inhibitive pigments
Finish	flat
Shade	Dark or light grey, cream, red brown
Specific gravity after mixing	1.4±0.1 Kg/Lit
Volume solid	75 ± 2 %
Flash point	29 °C
Typical dry film thickness	125-175 Microns per one coat
Number of coat	One or two
Mixing ratio by weight	Base : 100 parts Hardener : 16 parts
Substrate	cleaned steel
Application Method	Airless or Air spray, Brush, Roller
Thinner/ Cleaner	T-200
Weight of added thinner	7-10 %
Theoretical spreading rate - one coat ( at 150 microns)	5 M <sup>2</sup> /Lit
Packing	Base : 25 kg Hardener : 4 kg
Shelf life	12 Months

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## Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	6 Hours	28hours	36hours	--	13 days
25°C	4 hours	20 hours	24hours	--	7days
40°C	2 hours	15 hours	16hours	--	4 days

## Pot life

Temp	15°C	25°C	40°C
Pot life	6 hours	3 hours	90 minutes

## SURFACE PREPARATION

All Surfaces to be coated should be clean, dry and free from contamination. Prior to Paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

### Bare Steel:

Use Near-White blast cleaning to SSPC-SP10 to remove mill scale, rust, and other contaminants and leave a roughened surface.

Use power cleaning to bare metal SSPC-SP11 to remove mill scale, rust and other contaminants and leave a roughened surface.

### Primed Surfaces

EP-253 should always be applied over a recommended anti-corrosive coating see the primer surface should be dry and free from all contamination, and EP-253 must be applied within the overcoating intervals specified.

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. Sa2 ½ (ISO 8501 -1:1988) or SSPC-SP10, Abrasive, or SSPC-SP11, power tool cleaning) and patch primed prior to the application of EP-253.

### Shop primed steelwork

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO8501-1:1988) or SSPC-SP10. If the shop primer shows extensive or widely scattered breakdown overall sweep blasting may be necessary.

### Zinc Primed Steelwork

Ensure that the surface of the primer is clean, dry and free from contamination and zinc salts before application of EP-253. Ensure zinc primer is fully cured before application.

Surface preparation shall not take place in the following conditions:

- A) At temperature below 5 °C
- B) When the relative humidity greater than 85%
- C) When the metal surface temperature is less than 3 °C above the dew point
- D) Outside day light hours on exterior locations

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## Application Method

Material is supplied in two containers as a unit. Always mix a complete unit in the proportion supplied. Once the unit has been mixed it must be used within the working Pot life specified.

1-Agitate part A with a power agitator.

2-Combined entire contents of curing agent (part B) With Base (Part A) and mix thoroughly with power agitator.

(Stir during application to maintain uniformity of material.)

## Application Equipments

Air less Spray	Tip range 0.017-0.021 inch pressure at spray tip not less than 141-170 Bar (2000-2500 psi)	Total output
Air Spray	Nozzle orifice 1.8-2mm Nozzle pressure: 3-5 Bar (43-72 psi)	
Brush	Typically 70-90 mic can be achieved.	
Roller	Typically 70-90 mic can be achieved.	

**Flush Equipment with recommended Cleaner before and after use.**

## ENVIRONMENTAL CONDITIONS:

- To prevent moisture condensation during application, surface temperature must be at least 3 °C above dew point.
- Never apply coatings under reverse environmental condition.
- In hot climate, material temperature should be 20 to 25 °C prior to mixing; otherwise pot life becomes very short.
- For satisfactory cure, air and surface temperature must be above 10 °C.
- Paint shall not be applied when wind speed is in excess of 7 m/s.

Air temperature	10 to 40 °C
Surface temperature	10 to 50 °C
Material temperature	10 to 30 °C
Relative humidity	Max 80 %

## HEALTH AND SAFETY:

This product is Flammable. Keep away from heat and open flame .Keep container closed .Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.

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