

Ressi EPO Prime – Marine Mastic

Anticorrosive Epoxy Primer for C5 Very High Corrosivity Environments



Ressi EPO Prime – Marine Mastic is a high-performance, two-component anticorrosive epoxy primer specially formulated for C5 very high corrosivity environments as defined in ISO 12944. Designed for protection of steel structures exposed to extreme humidity, industrial pollution, and coastal, offshore, or aggressive marine conditions, it provides excellent adhesion, moisture resistance, and long-lasting corrosion protection.

This primer contains active anticorrosive pigments and functional additives that enhance barrier performance and prevent rust formation, even under severe industrial, coastal, or marine conditions. Once cured, it forms a tough, chemically resistant film, providing a strong foundation for intermediate and topcoat layers.

TYPICAL APPLICATION

- ✓ Structural steel frameworks in heavy industrial plants
- ✓ Marine, offshore, and coastal structures
- ✓ Storage tanks and pipelines in chemical and petrochemical industries
- ✓ Power plants, refineries, and coastal installations
- ✓ Heavy machinery and industrial equipment
- ✓ General fabrication and maintenance coatings in C5 environments

ADVANTAGES

- ✓ Formulated for C5 very high corrosivity environments (ISO 12944 compliant)
- ✓ Excellent adhesion to properly prepared steel substrates
- ✓ High resistance to extreme humidity, salinity, and industrial pollution
- ✓ Contains active anticorrosive pigments for long-term protection
- ✓ Cures to a tough, chemically resistant film
- ✓ Provides an ideal base for intermediate and topcoat systems
- ✓ Easy to apply by brush, roller, or spray

SURFACE PREPARATION AND MIXING

All surfaces must be clean, dry, and free from oil, grease, rust, mill scale, and other contaminants.

- ✓ For optimal results, abrasive blast cleaning to a minimum of Sa 2½ (ISO 8501-1) is recommended.
- ✓ If blasting is not possible, mechanical cleaning to St 3 standard may be used as an alternative.
- ✓ After cleaning, ensure the surface is free from dust and moisture before primer application.

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MIXING

Ressi EPO Prime – Marine Mastic is supplied in pre-measured two-component kits (Base and Hardener).

1. Add the entire contents of the Hardener to the Base.
2. Mix thoroughly using a low-speed mechanical mixer (300–400 rpm) until fully homogeneous.
3. Avoid entrapping air during mixing.

APPLICATION

- Apply the mixed material using airless spray, conventional spray, brush, or roller. Ensure
- ✓ uniform film thickness and complete coverage.
 - ✓ Recommended Dry Film Thickness (DFT): 180–200 microns per coat
 - ✓ Apply subsequent coats once the primer is dry to touch and within the specified overcoating interval

COVERAGE

Approximately 40–60 sq. ft. per kg per coat @ 180–200 microns, Theoretical coverage values are provided for reference only; actual material consumption may vary depending on surface profile, porosity, and application conditions

LIMITATIONS

When temperatures exceed 35°C working times will be reduced significantly. During application in cold weather correct conditioning is essential. Application should be halted if the ambient or substrate temperature is likely to fall below 10°C.

SHELF LIFE

12 Months from the date of manufacture when stored under warehouse conditions in original unopened packaging. Extreme temperature / Humidity may reduce shelf life.

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TECHNICAL PROPERTIES

Appearance	Opaque Liquid
Color	Red
Viscosity (Part A)	800 – 1200
Viscosity (Part B)	100 – 150
Mix Ratio (Part A: Part B)	100 : 25
Mix Viscosity @ 25°C / cPs	200 – 400
Mix Density /g / cc	1.2
Working time	90 – 120 minutes
Tack Free Time	4 – 5 Hours
Over coat time	8 Hours – 12 Hours (Depending upon nature of substrate)
Full Cure	7 days
Adhesion Test (ASTM D 3359)	5B (Pass)
Pencil Hardness (ASTM D 3363)	6H (Pass)
Mandrel Test (ASTM D 522)	12mm (Pass)
Impact Resistance Test (ASTM D 2794)	>60 inch-lb

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PACK SIZE

Ressi EPO Prime – Marine Mastic is available in the following pack sizes:

1 KG: Part A 800g
Part B 200g

5 KG: Part A 4 KG
Part B 1 KG

20 KG: Part A 16 KG
Part B 4 KG

HEALTH AND SAFETY

The packed material of **Ressi EPO Prime – Marine Mastic** is regarded as non-hazardous for transportation. Once opened extreme temperatures may cause the material to be flammable. Do not re use bags, containers, and packaging materials. It is recommended to dispose the packaging as per local rules and regulations. Gloves and suitable masks can be worn during application. Please refer to MSDS of the product for further health and safety information.