

## Ressi EPO Shield – Offshore Mastic

High-Performance Epoxy Topcoat for CX  
Extreme Corrosivity Environments



**Ressi EPO Shield – Offshore Mastic** is a high-performance, two-component epoxy coating formulated for steel substrates protected with anticorrosive primers in extreme corrosivity environments (CX). It is designed for offshore, marine, and industrial structures exposed to the harshest conditions, including constant salt spray, tropical humidity, chemical exposure, and industrial pollutants. This topcoat provides superior chemical, UV, abrasion, and weather resistance, forming a tough, smooth, and chemically resistant finish that enhances durability and maintains aesthetic appearance over anticorrosive primers.

## TYPICAL APPLICATION

- ✓ Offshore platforms, jetties, and marine installations under severe conditions
- ✓ Chemical plants and storage tanks exposed to aggressive chemicals
- ✓ Coastal and tropical steel structures with constant high humidity
- ✓ Pipelines, pressure vessels, and industrial machinery in extreme environments
- ✓ Heavy-duty fabrication requiring maximum corrosion protection
- ✓ Maintenance coatings in highly aggressive CX environments

## ADVANTAGES

- ✓ Designed for extreme CX corrosivity conditions beyond C5
- ✓ Excellent adhesion over epoxy primers for CX environments
- ✓ Maximum resistance to humidity, salinity, chemical exposure, and UV
- ✓ Smooth, durable, and highly aesthetic finish
- ✓ Tough, impact-, abrasion-, and chemical-resistant film
- ✓ Suitable for brush, roller, or spray application

## SURFACE PREPARATION AND MIXING

- ✓ Apply only over fully cured epoxy primer suitable for CX environments (minimum tack-free time: 4-6 hours, full cure: 7 days).
- ✓ Ensure primer surface is clean, dry, and free from dust, grease, or contaminants.
- ✓ Light sanding recommended for glossy or aged primer surfaces to ensure adhesion.

## MIXING

**Ressi EPO Shield – Offshore Mastic** is supplied in pre-measured two-component kits (Base and Hardener).

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

## APPLICATION

- ✓ Apply by airless spray, conventional spray, brush, or roller.
- ✓ Ensure uniform coverage and recommended dry film thickness (DFT).
- ✓ Recommended DFT per coat: 70–80 microns
- ✓ Number of coats: 2–3 depending on exposure severity
- Overcoating:
  - ✓ Minimum: 8 hours
  - ✓ Maximum: 48 hours (lightly sand if exceeded)

## COVERAGE

Approximately **70–80 sq. ft. per kg per coat @ 80–100 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.

## TECHNICAL PROPERTIES

Appearance	Opaque Liquid
Color	Available in Different Color (Please refer to Shade Card)
Viscosity (Part A)	1000 – 2500
Viscosity (Part B)	300 – 600
Mix Ratio (Part A: Part B)	100:25
Mix Viscosity @ 25°C / cPs	600 – 800
Mix Density /g / cc	1.15
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
Gloss	100 – 120 (High)
Adhesion Test (ASTM D 3359)	5B (Pass)
Pencil Hardness (ASTM D 3363)	6H (Pass)
Mandrel Test (ASTM D 522)	12mm (Pass)

## PACK SIZE

Ressi EPO Shield – Offshore 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 Shield – Offshore 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.