

Ressi EPO Shield – Industrial Mastic

High-Performance Epoxy Topcoat for C4
High Corrosivity Environments



Ressi EPO Shield – Industrial Mastic is a high-performance, two-component epoxy coating designed for steel substrates protected with anticorrosive primers in C4 high corrosivity environments as defined in ISO 12944. It provides excellent chemical, UV, and weather resistance, enhancing the durability and aesthetic finish of industrial, marine, and coastal steel structures. This topcoat is formulated with advanced pigments and resins to provide a smooth, hard, and chemically resistant finish, ensuring long-term protection over the anticorrosive primer.

TYPICAL APPLICATION

- ✓ Structural steel frameworks in industrial plants
- ✓ Marine and offshore structures
- ✓ Storage tanks, pipelines, and chemical processing equipment
- ✓ Power plants, refineries, and coastal installations
- ✓ Heavy machinery and industrial equipment
- ✓ General fabrication and maintenance coatings in C4 environments

ADVANTAGES

- ✓ ISO 12944 C4 compliant for high corrosivity conditions
- ✓ Excellent adhesion over Epoxy Paint Primer – C4
- ✓ High resistance to humidity, salinity, industrial pollution, and chemicals
- ✓ Smooth, durable, and aesthetically appealing finish
- ✓ Tough, impact- and abrasion-resistant film
- ✓ Suitable for brush, roller, or spray application

SURFACE PREPARATION AND MIXING

- ✓ Apply only over fully cured Epoxy Paint Primer – C4 (minimum tack-free time: 4–5 hours, full cure: 7 days).
- ✓ Ensure primer surface is clean, dry, and free from dust, grease, or contaminants.
- ✓ Light sanding is recommended for glossy or aged primer surfaces to enhance adhesion.

MIXING

Ressi EPO Shield – Industrial 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 using a low-speed mechanical mixer (300–400 rpm) until fully 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: 60–80 microns
 - ✓ Number of coats: 2–3, depending on exposure conditions
- Overcoating:
- Minimum: 8 hours
 - Maximum: 48 hours (or lightly sand before recoating 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 – 2000
Viscosity (Part B)	100 – 150
Mix Ratio (Part A: Part B)	100 : 25
Mix Viscosity @ 25°C / cPs	400 – 600
Mix Density /g / cc	1.09
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)	6mm (Pass)

PACK SIZE

Ressi EPO Shield – Industrial 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 – Industrial 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.