

Ressi EPO Shield – Protected

High-Performance Epoxy Topcoat for C2
Low Corrosivity Environments



Ressi EPO Shield – Protected is a high-performance, two-component epoxy-based coating system designed for C2 low corrosivity environments in accordance with ISO 12944. It provides excellent durability, gloss, and chemical resistance for both indoor and sheltered outdoor applications where limited moisture or pollution exposure occurs.

The coating forms a tough, glossy, and easy-to-clean film that resists abrasion, mild chemicals, and atmospheric conditions typical of C2 environments, ensuring long-lasting protection and appearance.

TYPICAL APPLICATION

- ✓ Indoor industrial and commercial facilities
- ✓ Warehouses and workshops
- ✓ Agricultural buildings and food processing areas
- ✓ Structural steel and metal frameworks in sheltered outdoor areas
- ✓ Light manufacturing plants and mechanical rooms
- ✓ Maintenance and repair coating systems
- ✓ Equipment and machinery exposed to occasional humidity

ADVANTAGES

- ✓ Designed for C2 low corrosivity environments (ISO 12944 compliant)
- ✓ Provides a durable, glossy, and decorative finish
- ✓ Excellent resistance to humidity, mild chemicals, and cleaning agents
- ✓ High adhesion and film toughness for indoor or semi-exposed use
- ✓ Long-term color and gloss retention
- ✓ Easy to apply by brush, roller, or spray
- ✓ Suitable for use over compatible epoxy primers or directly on prepared steel

SURFACE PREPARATION AND MIXING

- ✓ All surfaces must be clean, dry, and free from oil, grease, dust, rust, and other contaminants.
- ✓ For optimal performance, abrasive blast cleaning to a minimum of Sa 2 (ISO 8501-1) is recommended.
- ✓ Where blasting is not practical, mechanical or power tool cleaning to St 2–St 3 may be acceptable.
- ✓ Ensure the surface is completely dry and dust-free before application.
- ✓ For best results, apply over a compatible Epoxy Primer.

MIXING

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

1. Add the entire contents of Hardener (Part B) into the Base (Part A) container.
2. Mix thoroughly using a low-speed mechanical mixer (300–400 rpm) until a uniform mixture is achieved.
3. Avoid air entrapment during mixing.

APPLICATION

- ✓ Apply the mixed material by airless spray, conventional spray, brush, or roller, ensuring uniform film thickness and complete coverage.
- ✓ Recommended Dry Film Thickness (DFT): 90–100 microns per coat
- ✓ Apply subsequent coats once the previous coat is dry to touch and within the recommended overcoating interval.
- ✓ Ensure proper ventilation during application and curing.

COVERAGE

Approximately 90–100 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)	2000 – 3000
Viscosity (Part B)	30 – 50
Mix Ratio (Part A: Part B)	100:33
Mix Viscosity @ 25°C / cPs	400 – 600
Mix Density /g / cc	1.05
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)	5H (Pass)
Mandrel Test (ASTM D 522)	6mm (Pass)
Impact Resistance Test (ASTM D 2794)	>60 inch-lb.

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PACK SIZE

Ressi EPO Shield – Protected is available in the following pack sizes:

1 KG:	Part A 750g Part B 250g
5 KG:	Part A 3.75 KG Part B 1.25 KG
20 KG:	Part A 15 KG Part B 5 KG

HEALTH AND SAFETY

The packed material of **Ressi EPO Shield – Protected** 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.