

Ressi EPO Iron Coat is a solvent-loaded, low-viscosity, UV-stable metal protective coating specifically designed for application over metal surfaces. It is formulated with diluted Bisphenol A-based resins and polyamide-based hardeners, ensuring durability, abrasion resistance, and protection against mild acid exposure. This pigmented coating is ideal for exposed metal structures requiring enhanced weathering resistance and long-term performance.

ADVANTAGES

- ✓ **UV Stability** – Unlike conventional epoxy coatings, Ressi EPO Iron Coat is designed to resist UV degradation, preventing chalking and discoloration over time.
- ✓ **Abrasion Resistance** – The high-strength formulation provides excellent resistance to mechanical wear, making it suitable for industrial applications.
- ✓ **Corrosion Protection** – Offers strong protection against oxidation and environmental factors, extending the life of metal surfaces.
- ✓ **Mild Acid Resistance** – The chemical-resistant properties provide a safeguard against acidic environments, making it ideal for industrial and marine applications.
- ✓ **Excellent Adhesion** – Strong bonding capabilities with metal surfaces ensure long-lasting performance.
- ✓ **Low Viscosity** – Enables easy application, allowing the coating to penetrate and seal metal surfaces effectively.
- ✓ **Pigmented Finish** – Enhances aesthetics and provides an additional protective layer against environmental damage.
- ✓ **Weather Resistance** – Performs well in both indoor and outdoor conditions, offering protection against extreme weather fluctuations.
- ✓ **Solvent-Loaded System** – Ensures better flow and penetration, reducing surface imperfections during application.
- ✓ **Quick Drying** – Optimized formulation allows faster curing times, reducing downtime in industrial applications.

AREAS OF APPLICATION

Industrial Metal Structures: Metal frameworks, towers, and storage tanks in industrial facilities.

Marine & Coastal Protection: Ships, docks, piers, and offshore platforms exposed to saltwater and weathering.

Oil & Gas Industry: Refineries, pipelines, and drilling rigs requiring corrosion resistance.

Automobile & Transportation: Truck bodies, railway structures, and other metal transportation components.

Bridges & Infrastructure: Coating for steel bridges, overpasses, and pedestrian walkways.

Power Plants & Energy Sector: Protection for transformers, metal enclosures, and solar panel frameworks.

Agricultural & Industrial Equipment: Farm machinery, industrial conveyors, and heavy-duty processing equipment.

Metal Roofing & Structural Fabrication: Exposed metal roofs, warehouses, and metal-clad structures.

SURFACE PREPARATION

Ensure the metal surface is clean, dry, and free from contaminants such as grease, oil, rust, and old coatings. Perform abrasive blasting or mechanical cleaning to achieve an appropriate surface profile. Wipe down the surface with a solvent cleaner to remove residual dust or grease.

Pre-Coating Check: Apply a small test patch of **Ressi EPO Iron Primer** to ensure compatibility and adhesion. Address any adhesion issues before proceeding with the full application.

MIXING

Stir the base component (Resin) thoroughly before adding the hardener. Add the hardener to the resin in the recommended mixing ratio (As per packaging and mixing ratio in technical table), unless otherwise specified). Use a mechanical mixer at low speed (300-500 RPM) for 3-5 minutes to ensure homogeneous mixing. Allow the mixture to stand for 5 minutes to let air bubbles escape before application.

APPLICATION

Use a brush, roller, compressed air spray, or airless spray for application. Airless spray is preferred for achieving a thicker coat in one go. Brushes, rollers, and compressed air sprays usually result in thinner coats, so you may need to apply multiple layers to reach the recommended thickness. For small areas and touch-ups, brushes and rollers are recommended. Utilize high-quality brushes and short nap rollers, applying with full strokes while avoiding re-brushing. When using airless spray, avoid excessively high spraying pressure; use the minimum pressure necessary to achieve good atomization.

LIMITATIONS

At higher temperature pot life will be reduced. For working in cold climates (<5°C) **Ressi EPO Iron Coat** Containers need to be kept in hot water bath.

COVERAGE

80 SFT / Coat @ 100 Micron Thickness. Actual coverage rates may vary according to the substrate porosity and texture, wastage factors, site, and application conditions, etc. it is advisable to apply the material in a small area where it is to be applied to get a general idea of material coverage.

SHELF LIFE

12 months from the date of manufacture when stored under dry sheltered warehouse conditions in original unopened packaging. Extreme temperature / humidity may reduce shelf life.

HEALTH & SAFETY

Please dispose off containers of the materials as per local laws, rules and regulations. Usage of gloves, safety masks and other safety apparel as per health and safety laws should be done. Especially wear a respirator when sanding cured resin, and if you use alcohol inks DO NOT use a flame to remove bubbles, as alcohol is flammable. For further assistance, please refer to the MSDS of the product for further health and safety information.

PACK SIZE

Ressi EPO Iron Coat is available in the following pack sizes

1.16 KG Pack :	Part A 1 KG Part B 160g
11.6 KG Pack :	Part A 10 KG Part B 1.6 KG
23.2 KG Pack :	Part A 20 KG Part B 3.2 KG

TECHNICAL TABLE

Property	Test Method	Result
Appearance Part A	Visual	Low Viscosity, colored liquid
Appearance Part B	Visual	Low Viscosity, Yellow to Brown Liquid
Mix ratio (Part A: Part B)	Theoretical	100 : 16
Mix viscosity @ 25°C	ASTM D 2196	250 - 500 cps
Mix Density	-	1.3 g /cc
Pot life (300g mix) @ 25°C	-	>1 hour
Solid Content	-	65 – 67 %
Hardening time	-	24 hours
Full Cure	-	7 Days
Coverage per kg material @ 200 micron thickness	-	80 – 82 SFT

*Note: At 40°C pot life will half so application should be planned accordingly.
Typical Results under Laboratory Conditions