Ressi EPO IRON COAT CR
Chemical Resistant Coating for Metal

RESSICHEM®
adding life and value to your property

Ressi EPO Iron Coat CR is a high-performance, chemically resistant coating designed for marine and industrial applications. Formulated with a specially modified Bisphenol A-based resin and a clear cycloaliphatic amine hardener, it provides superior resistance to chemicals, corrosion, and environmental degradation. Ideal for ships, offshore platforms, chemical plants, refineries, and heavy industries, this solvent-based coating ensures long-term protection of metal structures exposed to aggressive marine conditions, industrial chemicals, and harsh operational environments.

ADVANTAGES

- ✔ **Superior Chemical Resistance** – Provides excellent protection against acids, alkalis, solvents, and industrial chemicals in harsh environments.
- ✔ **Exceptional Corrosion Protection** – Forms a durable barrier against rust and corrosion, extending the lifespan of metal structures.
- ✔ **High Adhesion Strength** – Bonds strongly to metal surfaces, ensuring long-lasting performance in marine and industrial applications.
- ✔ **Resistant to Marine Environments** – Withstands exposure to seawater, salt spray, and humid conditions, preventing degradation in offshore applications.
- ✔ **Durable and Abrasion Resistant** – Offers excellent mechanical strength, resisting wear and impact from industrial and marine operations.
- ✔ **Solvent-Based Fast Curing** – Provides a quicker drying time compared to water-based coatings, allowing efficient application and reduced downtime.
- ✔ **Thermal Stability** – Maintains integrity under fluctuating temperatures, making it ideal for extreme industrial and maritime conditions.
- ✔ **Long-Term Protection** – Ensures extended maintenance cycles, reducing the need for frequent recoating and lowering overall maintenance costs.

ریسیکیم®
مضبوطی اور پائیداری کے لئے
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AREAS OF APPLICATION

Marine Vessels & Ships – Provides corrosion and chemical resistance for ship hulls, decks, and other exposed metal surfaces.
Offshore Platforms & Oil Rigs – Protects structural steel components from harsh marine and chemical exposure.
Chemical Processing Plants – Shields equipment and pipelines from aggressive chemicals and corrosive industrial environments.
Petrochemical Refineries – Offers long-term protection against chemical spills, fumes, and high-temperature exposure.
Metal Storage Tanks – Coats and protects internal and external surfaces of tanks storing chemicals, fuels, and solvents.
Power Plants & Energy Facilities – Enhances the durability of metal infrastructure exposed to chemicals, heat, and moisture.
Bridges & Infrastructure – Prevents corrosion in steel bridges, docks, and industrial structures exposed to harsh weather conditions.
Manufacturing & Heavy Industries – Protects machinery, equipment, and structural components from wear, corrosion, and chemical exposure.
Mining & Processing Plants – Provides resistance to aggressive chemicals and abrasive materials in mining operations.
Wastewater Treatment Plants – Protects metal structures, tanks, and pipelines from chemical attack and constant moisture exposure.

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. The Surface should be primed using **Ressi EPO Iron Coat CR** or an Appropriate primer recommended by Ressichem. Priming instructions from the primer manufacturer or consultant should be followed.

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 CR** Containers need to be kept in hot water bath.

COVERAGE

68 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.

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PACK SIZE

Ressi EPO Iron Coat CR 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, Clear to Yellow Liquid
Mix ratio (Part A: Part B)	Theoretical	100 : 16
Mix viscosity @ 25°C	ASTM D 2196	1000 – 15000 cPs
Mix Density	-	1.56 g/cc
Pot life (300g mix) @ 25°C	-	>4 hour
Solid Content	-	65 – 67 %
Hardening time	-	24 hours
Full Cure	-	7 Days
Coverage per kg material @ 200 micron thickness	-	66 – 68 SFT

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

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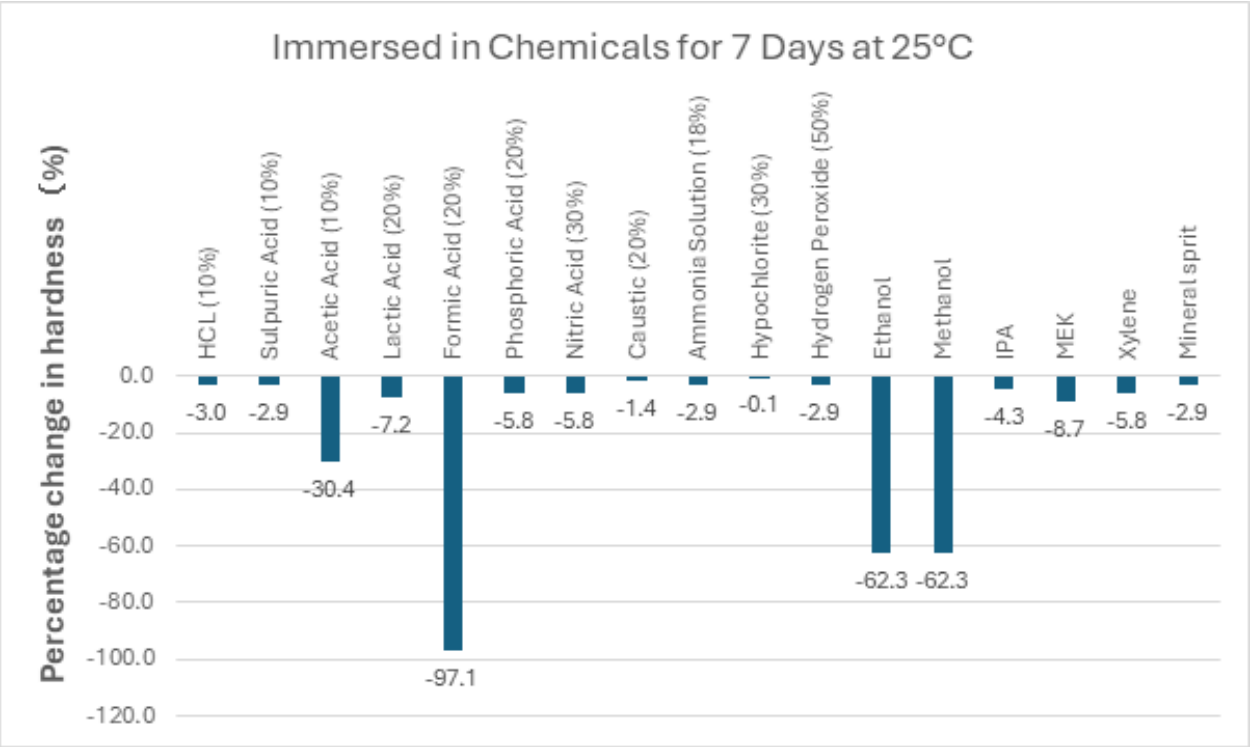
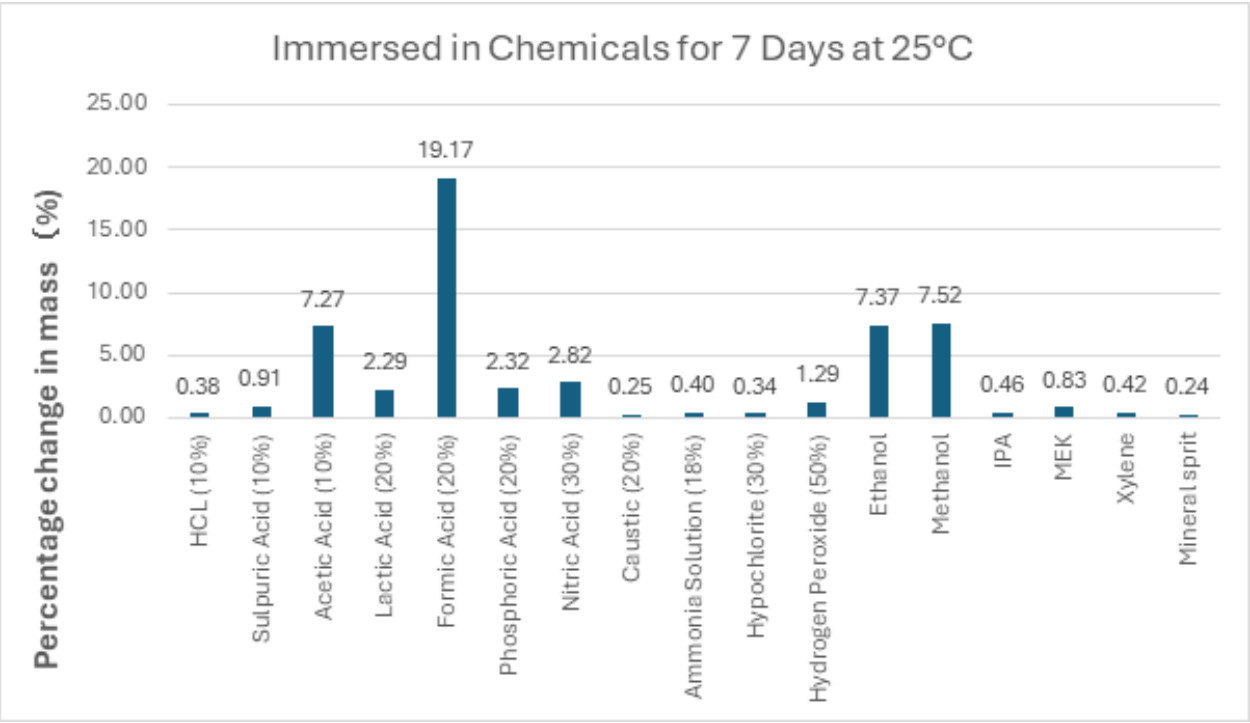
CHEMICAL RESISTANCE CHART

Chemicals Solutions	Chemical Resistance
HCL (10%)	★★★
Sulphuric Acid (10%)	★★★
Acetic Acid (10%)	★★
Lactic Acid (20%)	★★
Formic Acid (20%)	NR
Phosphoric Acid (20%)	★★
Nitric Acid (30%)	★★
Caustic (20%)	★★★
Ammonia Solution (18%)	★★★
Hypochlorite (30%)	★★★
Hydrogen Peroxide (50%)	★★★
Ethanol	★
Methanol	★
IPA	★★★
MEK	★★
Xylene	★★★
Mineral Spirit	★★★

KEY
★ (Fair)
★★ (Good)
★★★ (Excellent)
NR (not Recommended)

TECHNICAL DATASHEET RESSI EPO IRON COAT CR





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