



RXSOL

CHEMO PHARMA INTERNATIONAL

Technical Data Sheet (TDS)

RXSOL-22-6709-210

Corrosion Inhibitor Admixture CIA 222 Premium

Description

RXSOL CIA 222 Premium is a high-performance, liquid organic corrosion-inhibiting admixture formulated to protect steel reinforcement in concrete structures. It acts by forming a durable, adsorbed protective film on steel surfaces, inhibiting both anodic and cathodic corrosion processes. The product is particularly effective in chloride-rich and carbonation-prone environments such as marine structures, bridge decks, parking garages, and precast/prestressed concrete.

RXSOL CIA 222 Premium provides two levels of corrosion protection—reducing chloride ingress and forming a passive barrier on steel—ensuring superior long-term durability of concrete structures even under severe conditions. It meets ASTM C494/C494M Type S (Specific Performance) requirements.

Note: Non-chloride, non-corrosive, environmentally friendly formulation.

Advantages

- Inhibits corrosion at its most critical points.
- Forms a corrosion-resistant film on steel reinforcement.
- Reduces the ingress of chlorides and moisture.
- Enhances sulfate resistance and concrete durability.
- Improves service life of reinforced structures.
- Effective even in cracked or permeable concrete.
- Normal setting behavior—compatible with all cements.
- Free from calcium chloride and other chlorides.

Fields of Application

Designed for all types of reinforced, precast, and prestressed concrete, including:

- Bridge decks and marine structures
- Parking garages and ramps
- Foundations and basements
- Waterfront structures, piers, and jetties
- Repair mortars and overlays
- Industrial floors and slabs exposed to chloride attack

Method of Use

1. **Mixing:** Add **RXSOL CIA 222 Premium** directly into the concrete mix water or into the ready-mix drum during batching. Do not mix with other admixtures before addition.
2. **For Surface Application:** Apply uniformly using spray or brush on hardened concrete; allow full absorption before curing.
3. **Curing:** Ensure proper curing for optimum penetration and protection.

Dosage

Application Type	Dosage Rate	Remarks
New Concrete	0.6 L/m ³	Recommended standard dosage for optimum protection.
Repair Mortars / Overlays	1.0 – 2.0% of binder weight	Higher dosages for areas with severe chloride exposure.

Performance Characteristics

- **Plastic Properties:** Minimal effect on workability; air-entraining dosage may be adjusted as required.
- **Hardened Properties:** Slight reduction (5–10%) in compressive strength possible depending on mix; consult technical representative for mix optimization.
- **Slump and Temperature:** No adverse effect on slump or temperature development.
- **Concrete-Steel Bond:** Bond strength remains unaffected.

Product Notes

Corrosivity: Non-chloride, non-corrosive formulation; will not promote corrosion of steel reinforcement or galvanized systems.

Compatibility: Compatible with Portland cement, blended cements, and other admixtures in the RXSOL range (such as water-reducing or superplasticizing admixtures).

Environmental: Biodegradable, solvent-free, and low toxicity.

Specification

Appearance	Clear to pale yellow liquid
Odour / Solubility	Odourless / Fully soluble in water
Density (25°C)	1.07 ± 0.03 g/cm ³
pH (neat)	10.0 – 11.0
Chloride Content	Nil
Compatibility	No adverse effect on concrete components; may attack zinc if concentrated.
Packaging	Order No: RXSOL-40-CIA222P Size: 25 Ltr, 210 Ltr, 1000 Ltr IBC

Storage & Handling

Store in a cool, dry, and well-ventilated area at temperatures between **2°C and 52°C**. Protect from direct sunlight and frost. If frozen, thaw and mix thoroughly before use. Shelf life is **minimum 9 months** under recommended conditions. Avoid contact with eyes and skin. In case of contact, rinse thoroughly with water.

Handling Precautions

Handle like other alkaline chemical admixtures. Use protective gloves and goggles during handling. Refer to MSDS for detailed safety information.

Packaging

Available in **25 Ltr cans, 210 Ltr drums, and 1000 Ltr IBC totes**. Bulk supply available upon request.

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