



RXSOL

CHEMO PHARMA INTERNATIONAL

Technical Data Sheet (TDS)

RXSOL-40-4029-025

Corrosion Inhibitor Zinc Based

Corrosion Inhibitor Zinc Based is a high-performance **multi-component corrosion inhibitor system based on zinc chloride and phosphonic acid chemistry**. The product provides dual-mode protection through **anodic passivation and phosphonate adsorption film formation**, offering effective corrosion control in aqueous industrial systems.

It is designed for use in **closed loop cooling systems, industrial water circuits, hydrostatic testing fluids, and process water systems** where both corrosion and mild scaling tendencies are present.

Application

- Closed loop cooling water systems
- Industrial heat exchangers and chillers
- Hydrostatic testing of pipelines and vessels
- Temporary rust protection of metal surfaces
- Process water systems in chemical and petrochemical plants

DOSAGE BASED ON ZINC LEVELS

ACTIVE ZINC value in system after dosing should be maintained at 1 to 5 ppm.
Therefore, total product dosage must be in the range of 20-80 ppm to prevent scaling and corrosion
Correct dosage can be understood taking into account water quality and other factors.
Rapid protection against corrosion is achieved by pre-treating the system with between three and five times the normal maintenance dosage for seven to ten days. The maintenance dosage is then applied to the recirculating water at all times.

Properties

Property	Specification
Appearance	Clear to light amber liquid
Odour	Mild acidic
pH (as supplied)	3.0 - 5.5
Specific Gravity (25°C)	1.15 - 1.25
Solubility	Completely miscible in water
Flash Point	Non-flammable
Stability	Stable under normal storage conditions

Advantages

- Dual mechanism corrosion protection (inorganic + organic film formation)
- Rapid formation of protective zinc passivation layer
- Strong adsorption on steel and alloy surfaces via phosphonate groups
- Provides scale inhibition (calcium carbonate control)
- Effective in low to moderate hardness water systems
- Compatible with common industrial water treatment programs
- Suitable for short-term and long-term corrosion protection
- Works in both static and circulating systems

This Safety Data Sheet is provided by RXSOL. For the most current version of this document, please visit **eastindiachemicals.com**. This document is prepared in accordance with GHS / OSHA HazCom standards. The information contained herein is believed to be accurate but does not purport to be all-inclusive. It is the responsibility of the user to determine the suitability of this information for their application.