

ZX-C3-07

Oil Soluble Corrosion Inhibitor

General

As the properties of crude oil processed by refineries become increasingly severe, the issue of anti-corrosion in high-temperature areas has received growing attention. After more than two years of scientific research efforts by our professional scientific research team and many experts, we have finally successfully solved the problem of developing high-temperature corrosion inhibitors ZX-C3-07. This oil-soluble corrosion inhibitor ZX-C3-07 solves the following problem: film formation under high temperature and high flow rate. After a long period of experimentation, experts successfully attached long chains to the thick ring and then precisely compounded them to form a dense and firm film on the metal surface. Corrosion inhibition rate tests conducted in the laboratory under simulated high-temperature and high-flow-rate conditions show that the corrosion inhibition rate exceeds 95%.

This oil soluble corrosion inhibitor ZX-C3-07 is made with oil-soluble imidazoline as the main component. During the crude oil processing, the corrosion of HCl-H₂S-CO₂-H₂O occurring at the top of the distillation tower and in the condensation cooling system seriously affects the normal operation of the equipment. This product can form a dense protective film on the metal surface, effectively blocking the contact between corrosive media and the metal surface, thereby playing a very good anti-corrosion role.

Product features

It meets the requirement that the iron ions are less than 3ppm
The film-forming speed is fast
Oil-soluble solvents soluble in various fields

Composition

Imidazoline

Product

Appearance	Red-brown homogenous liquid
Density (20°C , g/cm³)	0.9~1.00
Freezing point °C	≤-10
Dynatic Viscosity (40°C) /(mm²/s)	≤100

Flash point °C	> 61
Corrosion rate %	20PPM ≥92%
	10PPM ≥90%
	5ppm ≥85%

Application

Usage and scope

This oil soluble corrosion inhibitor ZX-C3-07 is applicable to the anti-corrosion of the top of the atmospheric and vacuum distillation tower in oil refineries, the tower of the hydrocatalytic fracturing unit, the tower of the coking unit and pipeline equipment.

Usage instruction

Dilute diesel and kerosene evenly at a ratio of 1:5-30, and then continuously inject it into the high-temperature corroded area with a metering pump. Inject at a rate of 20 to 60ppm of the system processing volume. The initial injection volume is twice that of the normal period. After three days, gradually reduce it to the normal usage volume at a rate of 5ppm each day.

Indoor testing method:

Static 85°C, 0.1% HCl, 20# steel (or A3 steel), 6 hours
Dosage: 20ppm, 10ppm, 5ppm per above instruction

Packing

It is packed into 1000L IBC tanks with net weight 950kg, or 170kg per 200L steel barrels, or per clients request

Storage

This product should be stored in a ventilated, cool, dry storeroom and should be away from the fire and direct sunlight. The container must be sealed to prevent volatilization if certain amount of inhibitor has been remained in the container after use. The quality of the inhibitor product is guaranteed for one year in normal atmospheric temperature.

Safety and handling

Avoid skin and eye contact. Users of this product should wear latex gloves and protective glasses. If this product comes into contact with the skin, rinse thoroughly with plenty of water and then wash with soap. In case this item splashes into your eyes, please rinse thoroughly with water immediately on the spot and then seek medical attention for examination. In case of fire,

1211, dry powder, foam, CO2 and other fire extinguishers as well as yellow sand can be used to put out the fire.