



KRISIPERSE – 42 C

(CARBOXYLATE/SULPHONATE CO-POLYMER DISPERSANT)

PRODUCT DESCRIPTION

Krisisperse- 42 C is a low molecular weight carboxylate / sulphonate dispersant. It is highly effective dispersant and scale inhibitor for cooling water and boiler water treatment. It inhibits Calcium Phosphate deposits effectively, It gives excellent stabilization in Phosphate base, Zinc base and advanced all organic base water treatment programs. Krisisperse – 42 C shows excellent activity over wide range of pH, high hardness and temperature. Krisisperse- 42 C is stable to oxidizing agent like Chlorine.

CHEMISTRY AND MECHANISM :

Krisisperse-42 C copolymer combines two functional groups: strong Acid (Sulfonate) and weak Acid (Carboxylate) that provide optimal anti-scale/dispersant efficiency through the following different mechanisms :

- Solubility enhancement by threshold effect, which reduces precipitation of low solubility inorganic salts.
- Crystal modification, which deforms the growing inorganic salt crystal to give small, irregular, readily fractured crystals do not adhere to heat transfer surfaces and can be easily removed during cleaning operation.
- Dispersing activity, which prevents precipitated crystals or other inorganic particles from agglomerating and depositing on surfaces. The Sulfonate groups increase the negative charges of carboxylate groups adsorbed on to particles and by then, reinforce the repulsion between the particles, preventing them from aggregating into larger particles which can settle and deposit on tube surface and low flow area.

TYPICAL SPECIFICATION :

Product	Krisisperse-42 C
Appearance	Colourless to pale Yellow Liquid
Chemical Nature	Carboxylate/Sulphonate Co-Polymer
Average Molecular Weight (MW)	4500
Total Solids %	42 $\pm$ 2
Specific Gravity as is at 25 ° C	1.17 $\pm$ 0.03
pH as is	3 ~ 4

APPLICATION :

- Stabilizer and Ant scale deposition polymer for cooling water and Boiler water system.
- It is recommended for Phosphate base, Zinc base and advanced all organic programs. It helps to form a protective film of corrosion inhibitors on metal surface.
- Krisisperse- 42 C has a synergistic effect with other additives in preventing scale as well as corrosion.



BENEFITS :

- Excellent Calcium Phosphate Inhibition.
- Moderate Calcium Carbonate Inhibition.
- Excellent stability enables the formulator to manufacture one-package treatments as high pH gives maximum shelf life.
- Exhibits excellent thermal and chemical stability and can be used and stored over a broad range of temperature and pH's.
- Provides superior Iron tolerance when most of the commercially available polymers are deactivated in presence of soluble Iron.
- Due to excellent scale and corrosion inhibition efficiency, it keeps surfaces clean for maximum heat transfer and corrosion resistance.

SAFETY :

- Krisisperse- 42 C is generally safe but avoid contact with eyes and skin.
- Do not take internally.
- In case of contact with skin wash with plenty of water.
- In case of contact with eyes, flush with plenty of water and get prompt medical attention.

HANDLING :

- Hand gloves and safety goggles must be used while handling Krisisperse 24 C

STORAGE :

- Krisisperse 42 C is non-flammable and noncombustible.
- Store under shade and well ventilated place.
- Do not expose to direct sunlight.

PACKING :

- 50 Kg HDPE Carboy and 200 Kg HDPE Drums.