



#### COOLING WATER TREATMENT CHEMICAL

## **Cooling Water Chemistry**

Are you looking for Cooling Water Treatment Chemical Dealers in Rajasthan? Choose, NB Mercantile one of the best Nalco Cooling Water Treatment Chemical Authorized distributors in Rajasthan. Scale, corrosion and microbial fouling threaten your cooling system every day. Combat them with a cost-effective chemical program designed to your unique circumstances. Nalco Water provides the proven, innovative solutions you have come to expect from a world leader in water chemistry.

#### **Mechanical**

We survey the mechanical design of your Cooling Water systems to understand system capability

## **Operational**

We recommend ways to improve effectiveness and efficiency

#### **Chemical**

We survey your water's chemical properties to help us predict and prevent problems.

## Solutions to your problems:

We provide total solutions to all your cooling water problems:

**Corrosion** We offer a range of corrosion control solutions, including corrosion resistant materials, protective coatings, customized film-forming chemical inhibitors and water chemistry.

Fouling Our solutions prevent foulants from entering the cooling system, reduce foulants in the system, and control fouling deposits.

**Microbial deposits** Our BIO-MANAGE® program provides total system microbial control and risk minimization.

**Scale** We not only treat your water to prevent harmful scale; we also offer a comprehensive program to maintain and improve your process equipment and feed systems.





## **Cooling water treatment Chemicals:**

- Mild Steel and Carbon Steel Corrosion Inhibitor
- Yellow Metal Corrosion Inhibitor
- White Rust Inhibitor
- Scale Inhibitor
- Calcium Carbonate Scale Inhibitor
- Calcium Sulphate Scale Inhibitor
- Silica Scale Inhibitor
- Oxidizing Biocides
- Non-oxidizing Biocides
- Macrofouling Control
- Algaecides
- Bio-dispersants
- Close loop Corrosion Inhibitor
- Close loop Pre-cleaning chemical
- The next Generation of 3D TRASAR Cooling Water Technology

#### Mild Steel and Carbon Steel Corrosion Inhibitor:

Optimize production while minimizing downtime with the non-phosphorus corrosion inhibition program from Nalco Water. This innovative program controls corrosion and scaling, allowing cooling water systems to reach higher cycles of concentration with higher pH without compromising performance.

# Non-Phosphorus Program Reduces Corrosion Rate by 70%.





# **White Rust Inhibitor Programs:**

Galvanized steels typically found in refrigeration condensers can experience a type of premature corrosion, generally identified as "white rust". The term "white rust" refers to a type of corrosion product affecting galvanized surfaces characterized as "an accumulation of white, fluffy, or waxy non-protective zinc corrosion product" which adheres to the zinc surface of galvanized steel. With this non-protective porous reaction product in place, the surface is not passive to future zinc reaction and rapid corrosion may continue

#### **Yellow Metal Corrosion Inhibitor:**

Disinfection, pH drops, chlorides, and sulfates make corrosion prevention a challenge. Ultimately, corrosion issues can result in heat exchanger failure, causing production loss and requiring replacement.

# **High Stress Polymer program:**

Production rates at a refinery had increased. This resulted in exit water temperatures reaching 76 degrees Celsius in the critical coker overhead exchangers. The increased heat load was causing significant calcium phosphate fouling, and the exchanger required cleaning twice a year. Furthermore, the lifespan of the exchanger was reduced to less than five years. Nalco's High Stress Polymer program was introduced. Fouling was reduced, polymer consumption fell and corrosion was brought within acceptable limits.

## **Cooling Water Bio Control:**

Cooling towers are constantly exposed to environmental contaminants and bacteria. This requires a rapid response, accurate detection and a tailored program to control biological growth. Nalco Water offers a complete line of oxidizing and non-oxidizing biocides, algaecides and bio dispersants that are effective in a variety of cooling water applications, including open recirculating cooling towers, once-through cooling systems, closed loop cooling systems, air washers, cooling ponds, thermal energy storage tanks and pasteurizers.

# **Oxidizing Biocides:**

Oxidizers are effective against all types of microorganisms in cooling systems, including bacteria, fungi, algae, and yeast. Our STA-BR-EX™, ControlBrom™, ACTIBROM™ and Purate™ products can effectively reduce the amount of oxidizing biocide required to control microbiological activity in cooling water.





# **Non-oxidizing Biocides:**

Unlike oxidizers, non-oxidizers are more effective when applied in slug doses to target specific organisms. It's best practice to use a non-oxidizer in conjunction with an oxidizer to maintain control of cooling water systems. We offer an array of compounds to ensure the right treatment for your cooling system.

## **Macrofouling Control:**

For control of macrofouling by zebra mussels and other mollusks, we offer effective molluscicide treatments that can be used in fresh and potable water systems. Your sales engineer can help choose the right treatment program for your system.

## **Algaecides**

Algae can be more difficult to control on a common biocide treatment plan. Nalco Water offers products to beat algae in cooling systems and ponds including potable water.

## **Bio-dispersants**

Bio-dispersants should be used as part of a complete biocontrol program. They will break up biofilms and suspend bacteria so they are more readily killed by biocides

## Your goals are our goals:

As we work towards your goals, we monitor progress to keep operations on track. We act as your partner, ensuring you achieve your targets. In developing reliable, cost-effective and safe cooling water systems, we also deliver a measurable return on investment (ROI) with savings in water, energy, maintenance and repairs. We improve your systems':

#### **Cost efficiency**

We help you save energy, reduce downtime, and lower maintenance costs

#### Ease of use

We simplify all your operations

#### **Environment, health and safety**

We improve your system design, reducing liability and environmental impact.