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Product Bulletin

CT-200
COOLING WATER TREATMENT

APPLICATION
CH_2O Cooling Water Treatment products are designed to reduce generalized corrosion and mineral deposition in evaporative cooling systems. Excessive corrosion can result in loss of system integrity and mineral deposits reducing system efficiency.

Product performance is dependent upon maintaining proper chemical residuals, system operation, design, cleanliness, metallurgy, and water quality. For optimal results the following actions should be taken by qualified operational personnel:

- initial system cleaning and passivation;
- periodic inspections of all system components;
- maintaining systems free from particulate matter and sludge accumulations;
- insuring proper chemical feed rates & system bleed-off;
- control of biological organisms accompanied by periodic biological testing; and,
- daily testing and recording of chemical residuals.

If problems are encountered maintaining product residuals, additional analytical testing may be required. At your request a CH_2O Water Treatment Specialist may assist in performing these services.

Product **CT-200** is a corrosion inhibitor based on film-forming amines and phosphono-carboxylates to be used in semi-open cooling systems, where metal surfaces have to be protected from corrosion and deposits caused by hard water. **CT-200** is suitable for use in cooling systems that use hard or soft water.

CT-200 should always be applied as a concentrate, dilution is not recommended.

All parts of the dosing equipment coming into contact with the product must be made of PE, PVC, EPDM, or Teflon. The concentrated product is not compatible with Viton.

SAFETY & HANDLING PROCEDURE
This product is an alkaline liquid. When handling the product concentrate, minimum required safety gear is safety glasses and impervious gloves. Read and thoroughly understand the SDS before handling this product.

FEEDING TECHNIQUE
CT-200 should be added by an automatic dosing system where the dosage is proportional to the make-up water and depends on the cycles of concentration.

CONTROL
Add between 20 - 50 ppm to makeup water. The product residual can be determined from the phosphonate concentration or the filming amine concentration. When dosed at 50 ppm, there should be around 1.0 ppm of phosphate (via UV conversion method).

Contact your CH_2O representative for further information on analytical testing. Daily testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage. In addition to monitoring and maintaining treatment levels, it is the customer's responsibility to ensure the product is fit for its intended application.

DOSAGE
The dosage depends on many factors, such as concentration ratio, holding time index, thermal load, total alkalinity, carbonate hardness, and chloride content. Without pH regulation, the concentration cycles must maintain a maximum m-alkalinity value of 400 ppm and total hardness of 1220 ppm. Regulation of pH may be necessary when the m-alkalinity of the makeup water is higher than 300 ppm. With pH regulation below 8, the concentration cycles must maintain a maximum m-alkalinity value of 200 ppm and total hardness of 1200 ppm. Daily testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage. It is the customer's responsibility to monitor and maintain treatment levels with support from a CH_2O sales representative.

Note: Foaming may occur if **CT-200** is used in conjunction with other scale inhibitors. **CT-200** is not recommended for use in conjunction with **Bio-Max 15**, or **Bio-Dispersants**.

PHYSICAL PROPERTIES
pH of 1% Solution	10 - 11
Pounds per Gallon	8.6 – 9.1
Physical Appearance	Colorless to Yellow Liquid