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BIO-TROL 20
BIO-GUARD TREATMENT
Industrial Antimicrobial

APPLICATION

Cooling towers provide a near-ideal environment for microbial proliferation. Warm water temperatures, nutrients, and constant exposure to the surrounding air encourage growth and virtually assure ongoing contamination by microorganisms.

Unchecked microbial growth may also cause a rapid loss of heat-transfer efficiency by fouling piping, nozzles, process heat exchangers, and drift eliminators. Growth under deposits or slime masses can yield accelerated localized corrosion of system metal components.

Microbial organisms in nature vary considerably as a hazard to human health and in susceptibility to any particular bactericide. CH2O's BIO-GUARD series offers a wide variety of biocide products, which have been shown effective against microorganisms found in cooling tower waters.

WATERBORNE PATHOGENS

Legionella bacteria and other pathogens may be present in water systems. Application of a microbicide does not guarantee the absence of such pathogens, nor is it possible or reasonable to eliminate all risk of infection.

DIRECTIONS FOR USE

BIO-TROL 20 aids in controlling microbial growth in industrial and/or commercial recirculating cooling water systems, heat transfer systems, service water and auxiliary systems, air washer systems, industrial fresh water systems, solutions/emulsions, and industrial wastewater systems.

BIO TROL 20 is noncorrosive and does not contain heavy metals.

DIRECTIONS FOR USE...continued

BIO-TROL 20 is effective over a wide pH and temperature range. It is noncorrosive, non-foaming, and does not contain heavy metals

FEEDING TECHNIQUE

BIO-TROL 20 should be added to the water treatment system at a point of uniform mixing such as the basin area. For cooling systems greater than 4000 gallons, do not apply by open pouring of liquid; a metering pump delivery system is required for this use and application method.

SAFETY & HANDLING PROCEDURE

When handling BIO-TROL 20, it is important to avoid contact with the liquid and inhalation of the vapors. Wear long-sleeved shirt and pants or coveralls, goggles or face shield and chemical resistant gloves when handling.

DOSE & CONTROL (cooling water systems)

Dirty systems must be cleaned prior to treatment.

Initial Slug Dose: Add 350 – 1312.5 ppm of BIO-TROL 20, based on total water volume. Repeat until control is obtained. Thereafter, add either intermittently or continuously each day.

Intermittently: 131.25 – 525 ppm of BIO-TROL 20

Continuously: 70 – 245 ppm of BIO-TROL 20

Contact your CH2O water treatment specialist or an independent laboratory for further information on analytical testing. Daily testing is recommended to maintain proper control.

ACTIVE INGREDIENT

Tetrakis (hydroxymethyl) phosphonium sulfate.....20%

PHYSICAL PROPERTIES

pH of 1% Solution.....3-4
Pounds per Gallon.....8.9-9.4
Physical Appearance.....Clear, colorless liquid
Odor.....Mild
Flash Point.....>212°F

Seller Warranty

CH2O brand test reagent refills are available through your sales representative at no charge. Customers are required to confirm product compatibility via a control test for their specific application.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the product data sheet. Buyer is responsible to ensure that products and product dosages are appropriate for Buyer's particular application.

Applies to all products sold by CH2O, Inc., and is hereby communicated to all of its customers as a condition of sale. Use of CH2O products is subject to the Standard Terms and Conditions as listed on CH2O, Inc.'s website at: www.ch2o.com.

