

#541 MICROBIOCIDE will control algae and bacterial slimes found in recirculating cooling tower waters, oil field water flood and crude oil pipelines and storage facilities.

#541 MICROBIOCIDE helps clean and loosen slime debris from cooling and flooding system surfaces. When used in slug doses, no other microbiocide is required.

#541 MICROBIOCIDE is economical to use because it is concentrated. It should be handled with care.

Precautionary Statements

Hazards to Humans and domestic animals

DANGER:

Keep Out of Reach of Children. Corrosive. Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply in marine and/or estuarine oil fields. Do not discharge treated effluent into lakes, streams, ponds, or public waters unless in accordance with a NPDES permit. For guidance contact your Regional Office of the Environmental Protection Agency.

PHYSICAL HAZARDS

DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME.

STORAGE AND DISPOSAL

- DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL
- OPEN DUMPING IS PROHIBITED
- DO NOT REUSE EMPTY CONTAINER

PESTICIDE DISPOSAL

PESTICIDE THAT CANNOT BE USED, OR CHEMICALLY REPROCESSED SHOULD BE DISPOSED OF IN A LANDFILL APPROVED FOR PESTICIDES AWAY FROM WATER SUPPLIES.

CONTAINER DISPOSAL

DISPOSE OF IN AN INCINERATOR OR LANDFILL APPROVED FOR PESTICIDE CONTAINERS OR RETURN TO DRUM RECONDITIONER.

GENERAL

CONSULT FEDERAL, STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

METALL ASSOCIATES, INC.

102 Morewood Drive
Manchester, Mo. 63011
314-227-9908

#541

WATER TREATMENT MICROBIOCIDE

for the effective control of a broad spectrum of microorganisms in building and industrial recirculating cooling towers, oil field floor or salt water disposal systems and crude oil pipelines and storage facilities

Active Ingredient

1-Hydroxyethyl-1-benzyl-2-alkyl
imidazolium chloride

50%

Inert Ingredients

50%

Alkyl as in fatty acids of coconut oil

100%

KEEP OUT OF REACH OF CHILDREN

DANGER

Statement of Practical Treatment

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

SEE LEFT PANEL FOR
ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Registration No. 45705-7

EPA Establishment No. 10208-MO-1

Net Volume

FOR SALE FOR USE AND STORAGE
BY MAINTENANCE PERSONNEL ONLY

DIRECTIONS FOR USE

GENERAL CLASSIFICATION

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For controlling Algae, fungi, and a broad spectrum of bacteria and bacterial slime forming organisms that cause inefficient operating of building and industrial recirculating cooling towers, oil field water flood and crude oil pipeline and storage facilities use #541 MICROBIOCIDE as directed. For best results, slug feed. The frequency of addition of microbiocide needed depends on many factors. To optimize your use of #541 MICROBIOCIDE, follow this procedure:

Recirculating Cooling Towers

1. Initially use 7 fluid ounces per 1000 gallons of water to be treated (25 ppm active quarternary). Should the above dosage not give satisfactory results, use 13 fluid ounces per 1000 gallons of water. Repeat the initial dose every seven days or increase the frequency if needed.
2. When the above treatment level is successful, use 3 to 4 fluid ounces per 1000 gallons of water to maximize efficiency. Repeat weekly as needed. Should slime develop again, go back to initial dosage.

Recirculating cooling tower waters are inherently low in algae growth and bacteria count may be adequately controlled by the lower range of these dosages. Slug feed every seven days.

Dilute the appropriate amount of #541 MICROBIOCIDE in 1 or 2 gallons of water, then add to the sump of the tower. Note this product weighs 7.76 lbs per gallon (at 20 °C).

Should tower be heavily fouled, a precleaning is required.

Oil Field Water Floor or Salt Water Disposal Systems:
(Do not apply in Marine and Estuarine Oil Fields)

1. For the control of slime forming and sulfate reducing bacteria in oil field water flood or salt water disposal systems, add 35-50 ppm (active) #541 MICROBIOCIDE (9% — 13 gallons per 3000 barrels of water) continuously. Levels for effective control will vary depending on conditions at the site.
2. For intermittent use, dose at a rate of 35-70 ppm (active) #541 MICROBIOCIDE (9% — 18 gallons per 3000 barrels of water) for 4-8 hours per day, one to four times a week as needed to maintain control.

Crude Oil Pipeline and Storage Facilities

1. For the control of sulfate reducing bacteria, heterotrophic bacteria and corrosion in crude oil pipelines, slug dose with 0.5-3 gallons of #541 MICROBIOCIDE per diameter inch per mile of pipeline. Apply the appropriate dosage in slug form in front of the pipeline pig as required by the system.
2. For continuous pipeline feed applications, add 9.5 - 13 gallons of #541 MICROBIOCIDE per 3000 barrels of crude oil. #541 MICROBIOCIDE is added to the pipeline directly behind the pig.
3. For the treatment of crude oil storage facilities, add #541 MICROBIOCIDE at the rate of 9.5-13 gallons per 3000 barrels of crude oil.

Add #541 MICROBIOCIDE directly from the drum with the proper type of metering equipment. This product weighs 7.76 lbs/gallon (at 20 °C). Since crude oil pipeline and storage facilities differ in the material handled and operation, the recommended dosages may require adjustment based on practical experience.