DA"GER

MAY BE FATAL OR HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. CAUSES SEVERE SKIN IRRITATION AND EYE DAMAGE.

DO NOT BREATHE VAPOR OR SPRAY MIST. KEEP AWAY FROM HEAT AND OPEN FLAME. KEEP CONTAINER CLOSED.

Keep Out of Reach of Children. Corrosive. Causes severe skin irritation and eye 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.

FIRSTAID: 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.

PHYSICIAN: the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

Do not reuse empty drum. Return to drum reconditioner or destroy by perforating or crushing and burying in a safe place.

Toxic to fish and wildlife. Treated effluent should not be discharged where it will drain into lakes, streams and ponds. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label and in the Technical Bulletin.



UNDER THE PUNCHCIDE A ROR ROCKER

MICROBIOCIDE

FOR CONTROL OF BACTERIA IN INDUSTRIAL RECIRCULATING COOLING WATER TOWERS

DANGER: KEEP OUT OF REACH OF CHILDREN

See panel at left for first aid and additional precautionary statements.

Net Weight 250 Lb. Drum

UNDER THE PERENAL INSECTICIES PURGICIDE AND HUDRATICIES ACE FOR SCONOMIC POHON HICKORY POR SCONOMIC POHON HICKORY POHON HICKORY POR SCONOMIC POHON HICKORY POHON HIC

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MICROBIOCIDE

FOR CONTROL OF BACTERIA IN INDUSTRIAL RECIRCULATING COOLING WATER TOWERS

DANGER: KEEP OUT OF REACH OF CHILDREN

See panel at left for first aid and additional precautionary statements.

Net Weight 250 Lb. Drum

CALGON CORPORATION
CALGON CENTER • PITTSBURGH, PA. 15230

METHOD OF FEEDING

Badly fouled systems should be cleaned before initiating treatment. Slug feed H-303 as received, do not mix with other chemicals. Do not overfeed. Treatment should be applied at cooling tower sump, suction side of recirculating pump, or any other point that assures good mixing with system water. Slug feeding should be timed so the entire dose is applied within a one-hour period.

Recommended dosages allow for normal water loss due to evaporation, drift and system blowdown and afford adequate contact time with organisms. Your Calgon representative will provide technical assistance in determining optimum dosages in relation to specific plant conditions or problems.

Initial dosage: If system is noticeably fouled, slug feed 5.1 to 10.2 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system (40 to 80 ppm). Repeat until control is achieved.

Subsequent dosage: After bacterial control is achieved, feed 1.9 to 3.8 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system (15 to 30 ppm). Apply treatment two to three times per week, or as needed to maintain control.

Active Ingredients:

Methylene bis(thiocyanate)*	10%
Inert Ingredients	90%

^{*}Equivalent to 0.88 Lbs./Gal.



Controls Bacteria in Industrial Recirculating Cooling Water Towers

CHEMICAL PRODUCT BULLETIN

description

H-303 Microbiocide is a nonviscous, pale amber liquid product containing nonoxidizing ingredients formulated specifically to control bacterial growth in industrial recirculating cooling water towers.

purposes

H-303 Microbiocide improves s, stem performance and aids in maintaining design capacity by keeping cooling towers, heat exchangers and water distribution piping free of bacterial slime deposits.

advantages

- Nenoxidizing and nonvolatile
- No adverse effects on cooling tower wood
- Noncorrosive to system metals at use concentrations
- Odorless at use concentrations
- Readily dispersible in water
- Can be fed directly from shipping drum
- Nonfoaming

method of feeding

Badly fouled systems should be cleaned before initiating treatment. Slug feed H-303 as received, do not mix with other chemicals. Do not overfeed. Treatment should be applied at cooling tower sump, suction side of recirculating pump, or any other point that assures good mixing with system water. Slug feeding should be timed so the entire dose is applied within a one-hour period.

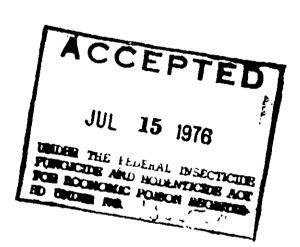
Recommended dosages allow for normal water loss due to evaporation, drift and system blowdown and afford adequate contact time with organisms. Your Calgon representative will provide technical assistance in determining optimum dosages in relation to specific plant conditions or problems.

Initial dosage: If system is noticeably fouled, slug feed 5.1 to 19.2 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system 40 to 80 ppm. Repeat until control is achieved.

Subsequent dosage: After bacterial control is achieved, feed 1.9 to 3.8 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system 15 to 30 ppm. Apply treatment two to three times per week, or as needed to maintain control.

control

No control testing is required other than visual examination of areas where slime deposits normally occur. To supplement visual examination, a total plate count evaluation may be performed.



specifications

appearance active ingredient specific gravity weight per gallon flash point TOC pH ot 1 , solution treezing point nonviscous, pale amber liquid 10' minunum 1,068 8,87 lbs 195 F 7,45 10 F

storage

H-303 is stable at room temperature. Some crystallization may occur in sub-freezing weather, but placement of the product in a heated storage area will return it to original condition with biocidal properties unimpaired. Do not store near heat or open flame. Keep container closed when not in use.

packaging

Available in 5-gallon cans, 40 lbs net, and in 55-gallon nonreturnable steel drums, 435 lbs net. Freight classification: Disinfectants, other than medicinal and other toilet preparations.

precautions

DANGER Can be harmful or fatal if swallowed or absorbed through skin. Product is corrosive and can cause severe eye and skin damage. Avoid contact with skin, eyes and clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing spray mist. Do not use, pour, spill or store near heat or open flame. Avoid contamination of food. Keep out of reach of children.

FIRST AID—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.

It swallowed, drink promptly a large quantity of milk, egg whites or gelatin solution. It 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 layage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds or public water. Apply this product only as specified.

Do not reuse empty drum. Return drum to reconditioner or rinse well with soap solution and discard. Do not contaminate water by disposal of waste.

For technical assistance regarding specific on site problems contact Cooling Water Department, Water Management Division—Calgori Corporation, P. O. Box 1346, Pittsburgh, Pa. 15230



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R-G# 10445-1 MM 31



CHEMICAL PRODUCT BULLETIN

description

H-303 Microbiocide is a nonviscous, pale amber liquid product. containing nonoxidizing ingredients formulated specifically to controi bacterial growth in industrial recirculating cooling water towers.

purposes

H-303 Microbiocide improves system performance and aids in maintaining design capacity by keeping cooling towers, heat exchangers and water distribution piping free of bacterial slime deposits.

advantages

- Nonoxidizing and nonvolatile.
- No adverse effects on cooling tower wood.
- Noncorrosive to system metals at use concentrations
- Odorless at use concentrations
- Real ly dispersible in water
- Can be fed directly from shipping drum
- Nonfoaming

method of feeding

Badly fouled systems should be cleaned before initiating treatment. Blug feed H-303 as received, do not mix with other chemicals. Do not overfeed. Treatment should be applied at cooling lower sump. suction side of recirculating pump, or any other point that assures good mixing with system water. Slug feeding should be timed so the entire dose is applied within a one-hour period.

Recommended dosages allow for normal water loss due to evappration, drift and system blowdown and afford adequate contact. time with organisms. Your Calgon representative will provide technical assistance in determining optimum dosages in relation to specific plant conditions or problems.

Initial dosage: If system is noticeably fouled, slug feed 51 to 10.2 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system 40 to 80 ppm. Repeat until control is achieved.

Subsequent doesge: After bacterial control is achieved, feed 19 to 3.8 fluid ounces of H-303 Microbiocide per 1000 gallons of water in the system (15 to 30 ppm). Apply treatment two to three times. per week, or as needed to maintain control.

control

No control testing is required other than visual examination of areas where slime deposits normally occur. To supplement visual examination, a total plate count evaluation may be performed.



Colum Commission 1973

Cultatio 13-50s

specifications

appearance active ingredient specific gravity weight per gallon flash point. TOC pH of I', solution freezing point

nonviscous, pale amber liquid 1.10. minimum, 1.069 8.87 lbs 196° F 7.45 10° F

storage

H-303 is stable at more temperature. Some crystallization may occur in sub-freezing weather, but placement of the product in a heated storage area will return it to original condition with biocidal properties unimpaired. Do not store near heat or open flame. Keep container closed when not in use.

packaging

Available in 5-gallon cans, 40 hs net, and in 55-gallon nonreturnable steel drums, 435 hs net. Freight classification: Disinfectants, other than medicinal and other toilet preparations.

precautions

DANGER. Can be narmful or fatal if swallowed or acombed through skin. Product is corrosive and can cause severe or a and skin damage. Avoid contact with skin, eves and clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing spray mist. Do not use pour spill or store near heat or open flame. Avoid contamination of food. Keep out of reach of children.

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

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

NOTE TO PHYSICIAN Propagie mucomi damage may conraindicate the use of gastino lavage. Measures against circulatory shock, respiratory tepression, and convulsion may be needed.

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Do not reuse empty drum. Return drum to reconditioner or cinse well with soap solution and discard. Do not contaminate water by disposal of waste.

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SLS. LEWIH

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For technical assistance regarding specific on site problems contact Carling Water Department, Water Makagement Division Calgon Corporation, P. O. Box 1346, Pittsburgh, Pa. 15230



DA 'GER

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OG NGT BREATHE VAPOR OR SPRAY MIST. KEEP AWAY FROM HEAT AND OPEN FLAME. KEEP CONTAINER CLOSED.

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FIRST ATC: In case of contact, immediately flush eyes or obtain with clienty of water for at east .5 minutes. For eyes, call a physician, Remove and wash contaminated dothing before reuse.

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NOTE TO Probable mucosal tamage may contraindicate PHYSICIAN: the use of gastric avage. Measures scainst croulatory chock, respiratory teoression and conjunition may be needed.

Co not euse amony from Return to from reconditioner or testroy by perforating or coupling and buryon, in a case blace.

Toxic to rish and widdlife. Treated afficient chould not be assistanced where a will train into aleas, areams and annits. To not contaminate water by cleaning at equipment, or account awastes. Apply this annually as openified in this above and in the Technical Bulletin.

EPA Registration No. 10445-11



H-30,

MICROBIOCIDE

FOR CONTROL OF BACTERIA IN INDUSTRIAL RECIRCULATING COOLING WATER TOWERS

DANGER: KEEP OUT OF REACH OF CHILDREN
Lee panel at eit in lind and additional precautionary statements.

Net Weight 250 Lb. Drum

