

storage

H-106 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.

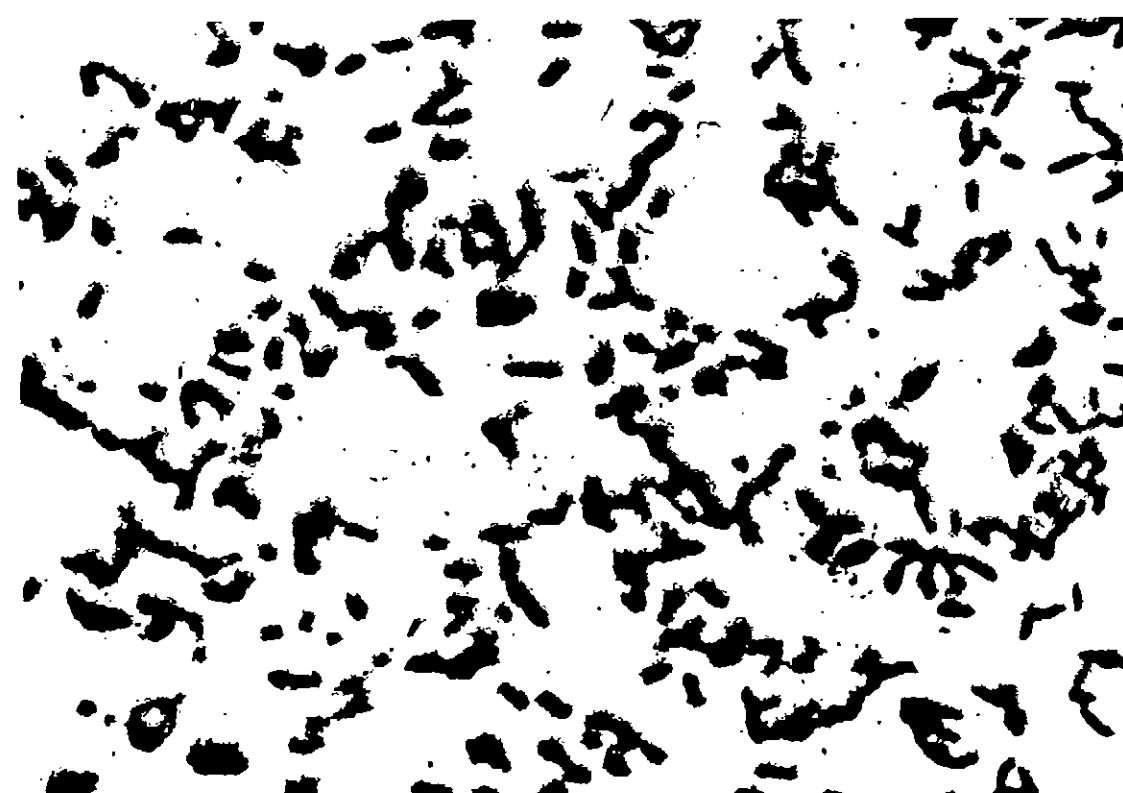
FIRST AID — In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of milk, egg whites or gelatin solution. 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.

This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds or public water. Apply H-106 only as specified in this bulletin.

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



Micrograph (970x) of aerobic bacteria. Prolific growths of bacteria in a cooling system will be in the form of slimy zoogloeal masses which may interfere with heat transfer. In addition, bacterial growths will act as a binder for dead algae, mineral sludge or corrosion products.

*Cooling Water Department, Water Management, Division, Calgon Corporation,
P.O. Box 1346, Pittsburgh, Pa. 15230.*



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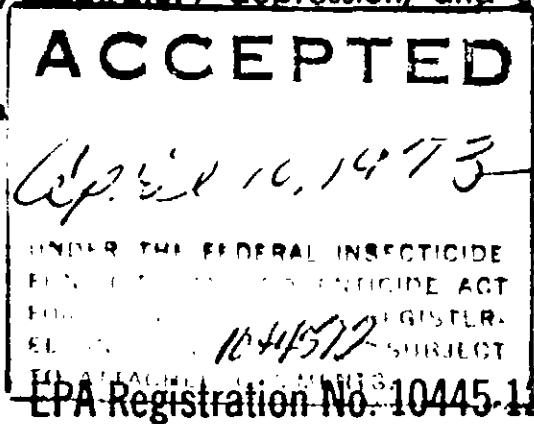
DANGER:

Keep Out of Reach of Children
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
Corrosive

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.

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H-130

MICROBIOCIDES

TWIN-CHAIN QUATERNARY AMMONIUM COMPOUND CONCENTRATE
WATER TREATMENT MICROBIOCIDES FOR BUILDING AND INDUSTRIAL COOLING TOWERS

DANGER: KEEP OUT OF REACH OF CHILDREN
See left panel for additional precautionary statements.

Active Ingredients
Didecyl dimethyl ammonium chloride.....50%
Isopropyl alcohol.....20%
Inert Ingredients.....30%
100%

Net Weight 400 lbs.

Net Volume 55 gals.

Will control algae and
cooling tower waters
cooling system surface
microbiocide is require
Is economical to use
handled with care.

To control algae and
CIDES as directed. For
addition of microbio
To optimize your use
procedure.

1. Initially use 6 fluid ounces per 1000 gallons of water treated (20 ppm as chlorine). Should the above concentration be insufficient, use 9 fluid ounces per 1000 gallons. Repeat the initial concentration if needed.
2. When the above concentration is insufficient, use 12 fluid ounces per 1000 gallons. Repeat weekly. Should slime develop, use 15 fluid ounces per 1000 gallons.

Cooling tower waters
and bacteria count ma
range of these dosage
Dilute the appropriate
1 or 2 gallons of wat
Note, this product wei
This product is toxic
discharged where it v
public water. Apply th
Should tower be heav
Do not reuse empty dr
well with soap solutio
by disposal of waste.

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H-130

MICROBIOCID

TWIN-CHAIN QUATERNARY AMMONIUM COMPOUND CONCENTRATE

WATER TREATMENT MICROBIOCID FOR BUILDING AND INDUSTRIAL COOLING TOWERS

DANGER: KEEP OUT OF REACH OF CHILDREN
See left panel for additional precautionary statements.

Active Ingredients	
Didecyl dimethyl ammonium chloride.....	50%
Isopropyl alcohol.....	20%
Inert Ingredients.....	30%
	<hr/>
	100%

Net Weight 400 lbs.

Net Volume 55 gals.

Will control algae and bacterial slimes found in recirculating cooling tower waters. Helps clean and loosen slime debris from cooling system surfaces. When used in slug doses, no other microbiocide is required.

Is economical to use because it is concentrated. It should be handled with care.

USE DIRECTIONS

To control algae and bacterial slimes, use H-130 MICROBIOCID as directed. For best results, slug feed. The frequency of addition of microbiocide needed depends on many factors. To optimize your use of H-130 MICROBIOCID, follow this procedure.

1. Initially use 6 fluid ounces per 1000 gallons of water to be treated (20 ppm active quaternary).
Should the above dosage not give satisfactory results, use 9 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 2 to 3 fluid ounces per 1000 gallons of water to maximize efficiency. Repeat weekly as needed.
Should slime develop again, go back to initial dosage.

Cooling tower waters that are inherently low in algae growth and bacteria count may be adequately controlled by the lower range of these dosages; slug fed every seven days.

Dilute the appropriate amount of H-130 MICROBIOCID in 1 or 2 gallons of water then add to the sump of the tower. Note, this product weighs 7.49 lbs per gallon (at 20°C.)

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 on this label.

Should tower be heavily fouled, a precleaning is required.

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

Made in U.S.A.

CALGON CORPORATION
CALGON CENTER • PITTSBURGH, PA. 15230

H-130
MICROBIOCID

description

H-130 Microbiocide is a biodegradable, wide-spectrum, organic liquid microbiocide based on dialkyl quaternary ammonium compounds formulated to provide maximum effectiveness in industrial recirculating cooling water systems. Due to its unconventional molecular structure, H-130 possesses superior biocidal properties in comparison to standard commercial quaternaries. H-130 has a high resistance to deactivation properties of anionics. Hard water tolerance is exceptionally high, well beyond that observed in any commercial quaternary.

purpose

H-130 Microbiocide is used to control buildup of biological slimes formed by algae and bacteria in industrial recirculating cooling water systems. The product also is effective in controlling sulfate-reducing bacteria. High surface activity aids in cleaning systems by loosening and dispersing existing slime deposits from surfaces of cooling system equipment.

advantages

- Biodegradable
- More effective than most quaternaries
- High hard-water tolerance
- Maintains microbiocidal effectiveness in presence of anionics
- Noncorrosive, nonoxidizing and nonvolatile
- High surface activity aids in cleaning system
- Compatible with other treatment chemicals at use concentrations

feed requirements

For controlling algae and bacterial slime buildup best results are obtained by slug feeding. When used in slug doses, no other microbiocide is required. Frequency of H-130 addition depends on severity of the biological growth. Optimum results are usually obtained by the following procedure:

1. Initially, use six fluid ounces of H-130 per 1000 gallons of water to be treated. This supplies a treatment concentration of 20 ppm active quaternary. If this does not produce satisfactory results, increase dosage to nine fluid ounces of H-130 per 1000 gallons of water. This will increase concentration to 30 ppm active quaternary. After optimum concentration has been determined, repeat treatment weekly or increase frequency as required.
2. After treatment at above concentration has brought biological growth under control, reduce concentration to two to three fluid ounces of H-130 per 1000 gallons of water to maintain treatment. Repeat weekly or as needed. Should slime develop again, repeat initial dosage.

Cooling waters inherently low in algae growth and bacteria count may be treated adequately with the lower range dosages; slug feed every seven days.