

## FEED REQUIREMENTS

Begin treatment when the system is in jeopardy of becoming affected or after cleaning systems whose efficiency is already impaired.

### Continuous Feed Method

**INITIAL DOSE:** When the system is just noticeably fouled, apply 6.5 to 13.0 fluid ounces of H-212 per thousand gallons of makeup water (50-100 ppm).

**SUBSEQUENT DOSE:** Maintain this treatment level by starting a continuous feed of 0.66 to 6.5 fluid ounces of H-212 per thousand gallons of water lost by blowdown (5-50 ppm). Badly fouled systems must be cleaned before treatment is begun.

### Intermittent or Slug Method

**INITIAL DOSE:** When the system is noticeably fouled, apply 10.0 to 26.0 fluid ounces of H-212 per thousand gallons of water (50-100 ppm) in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, add 3.3 to 13.0 fluid ounces of H-212 per thousand gallons of water in the system weekly or as needed to maintain control (25-100 ppm). Badly fouled systems must be cleaned before treatment is begun.

**Method of Feeding:** H-212 should be fed received and not diluted with water or mixed with any other chemical feed solution. Product can form potentially explosive materials when mixed with strong oxidizing agents such as chlorine. Apply at a point in the system where the product will be uniformly mixed.

## Store above 32°F

E.P.A. Registration No. 10445-6

E.P.A. Est. 10445-PA-1

6015-400A



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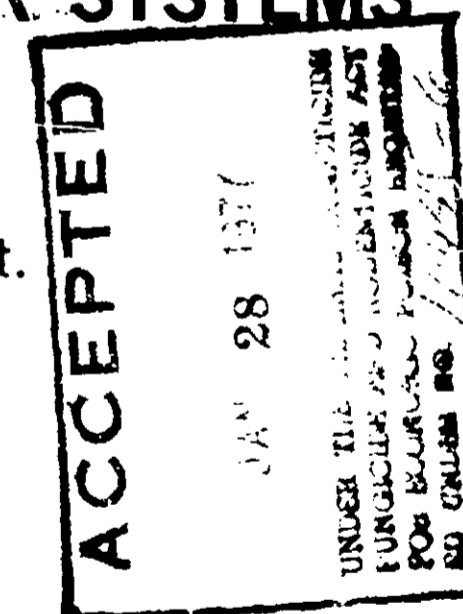
# H-212 MICROBIOCIDES

## FOR CONTROL OF BACTERIA, ALGAE, DIATOMS, MOLD AND SLIME GROWTHS IN RECIRCULATING INDUSTRIAL WATER SYSTEMS

### WARNING! KEEP OUT OF REACH OF CHILDREN

See panel at right for first aid and additional precautionary statement.

## Net Weight 400 Lb. Drum



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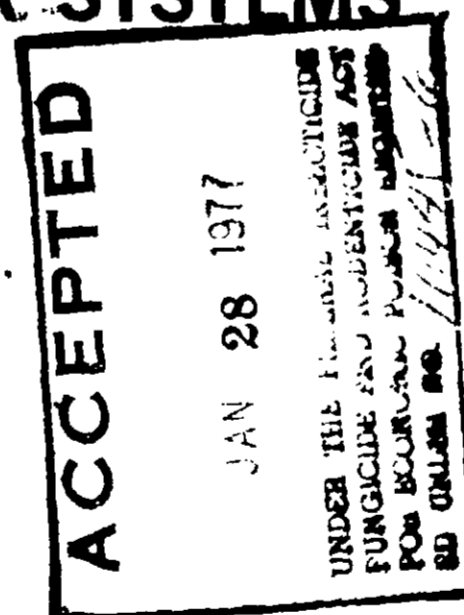
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See panel at right for first aid and additional precautionary statement.

**Net Weight 400 Lb. Drum**



**WARNING:**

May be fatal if swallowed

May be absorbed through skin

Causes skin irritation

Combustible

Keep container closed. Do not get on skin, in eyes, or on clothing. Avoid breathing spray mist. In case of contact, remove contaminated clothing and immediately wash skin with soap and water. If irritation persists get medical attention. In case of contact with eyes, immediately flush with water and get medical attention. Wash contaminated clothing before re-use. Avoid storage near feed and food products. Do not use or store near heat or open flame.

This product is toxic to fish. Treated effluent should not be discarded where it will drain into lakes, streams, ponds or public water. 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.

Do not reuse empty drum. Rinse empty drum thoroughly with water before returning to reconditioner or discarding.

**Active Ingredients:**

- Dodecylguanidine hydrochloride . 10.78%
- Bis (tri-n-butyltin) oxide . . . . . 3.32%
- Isopropanol . . . . . 9.90%
- Xylol . . . . . 5.00%
- Inert ingredients** . . . . . 71.00%

Made in U. S. A.



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# H-212

## MICROBIOCIDES

### CHEMICAL PRODUCT BULLETIN

#### description and application

H-212 Microbiocide is a nonoxidizing chemical compound for use in recirculating cooling water systems. Being specially formulated from a cationic nitrogen base and metallo-organic compound (not mercury or copper), Calgon® H-212 Microbiocide provides a high degree of toxicity against microorganisms commonly found in industrial cooling waters. The complex nature of H-212 insures high resistance against build-up of immunity by organisms. Supplied as a ready-to-use liquid, it can be diluted with water in any desired proportion. Unlike many nitrogen-based biocides, it causes very little foam in the treated system.

#### advantages

1. Forms a thin microbiocidal film on metal and wood surfaces.
2. Film resistance to water leaching maintains biostatic state for extended periods.
3. Effective microbiocidal action against many organisms.
4. Essentially nonfoaming at use concentrations even in high solids waters.
5. Noncorrosive to metals in the cooling system; contains no copper or mercury salts.

#### feed requirements

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##### Continuous Feed Method

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##### Intermittent or Slug Method

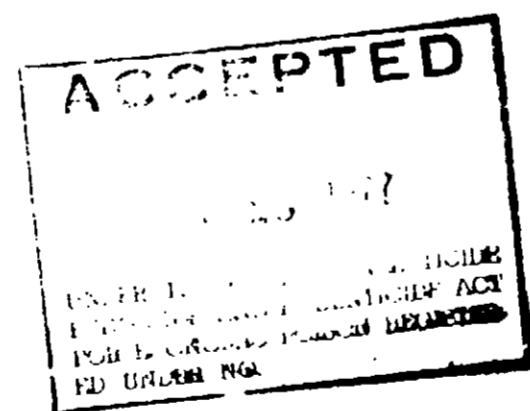
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**Method of Feeding:** H-212 should be fed as received and not diluted with water or mixed with any other chemical feed solution. Product can form potentially explosive materials when mixed with strong oxidizing agents such as chlorine. Apply at a point in the system where the product will be uniformly mixed.

#### control

No control testing necessary other than visual or microscopic examination of growths.



## specifications

Specific Gravity	0.960
Weight Gallon	8.00 lbs.
Color	pale yellow
Odor	pungent
Flash Point (COC)	99 F.
Freezing Point	29 F.
pH of Concentrate	8.4
pH of Solution	7.6

## packaging

Available in 55 gallon drums, net weight 400 pounds. Also available in 5-gallon cans, net weight 38 pounds. Freight Classification Disinfectants, N.O.I., other than medicinal and other than toilet preparations.

## storage

Keep away from open flame and heat. Store in a cool area. Keep container closed when not in use.

## precautions

**WARNING:** May be fatal if swallowed. May be absorbed through skin. Causes skin irritation. Combustible.

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



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