



010445-00108-042199

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Systems Integration Group, Inc.

PM 32

4-21-99

1043

APR 21 1999

Henry P. Katstra  
Calgon Corporation  
P.O. Box 1346  
Pittsburgh, PA 15230

Subject: H-940 Microbiocide  
EPA Registration No. 10445-108  
Submission Dated February 18, 1999

Dear Mr. Katstra:

This letter is in reference to the label submitted with the February 18, 1999, application for notification.

The Agency determined that the label submitted with this notification needed to be reviewed as an amendment under the Federal Insecticide, Fungicide and Rodenticide Act, as amended for Sodium Bromide to used in Pulp and Paper Mills. The label for this product has been reviewed and is acceptable subject to the comment listed below.

Sodium Bromide is not cleared under 21 CFR 176.170-176.300 for food use in Pulp and Paper Mills and would require a Food Additive Petition for that purpose. Therefore, the label must have the disclaimer statement "Not for use on food grade paper" under the Pulp and Paper Mill section.

If you have any questions concerning this letter, please call Wanda Mitchell at (703) 308-6345.

Sincerely,



Robert S. Brennis  
Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7504C)

CONCURRENCES

SYMBOL	7510C							
SURNAME	Mitchell							
DATE	4-21-99							

EPA Form 1320-1A (1/90)

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

APR 21 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide  
registered under EPA Reg. No.  
10445-108



00-67C1-00

# H-940 MICROBIOCIDES

FOR USE AS A DISINFECTANT, SANITIZER, BACTERICIDE, SLIMICIDE, FUNGICIDE,  
ALGICIDE, AND MOLLUSK CONTROL AGENT IN RECIRCULATING COOLING WATER  
SYSTEMS, ONCE THROUGH COOLING WATER SYSTEMS, PULP AND PAPER MILLS  
AND WASTEWATER TREATMENT SYSTEMS.

<b>ACTIVE INGREDIENT:</b>	
Sodium Bromide .....	40.0%
Inert Ingredients .....	60.0%
<b>Total:</b>	<b>100%</b>

**KEEP OUT OF REACH OF CHILDREN  
WARNING**

**STATEMENT OF PRACTICAL TREATMENT**

**Eye Contact:** Flush eyes with cold water for at least 15 minutes. If irritation persists, seek medical attention immediately. **Skin Contact:** Prolonged contact can produce skin irritation. If skin contact occurs, wash with cold water for 15 minutes.

**SEE OTHER PRECAUTIONS ON SIDE PANEL**

- |              |   |
|--------------|---|
| EPA Reg. No. | <input type="checkbox"/> EPA Est. No. 10445-CA-01 |
|              | <input type="checkbox"/> EPA Est. No. 10445-PA-01 |
|              | <input type="checkbox"/> EPA Est. No. 10445-TX-01 |

**Net Weight: 580 Lb. (263.1 Kg.)**

**CALGON CORPORATION**  
CALGON CENTER • PITTSBURGH, PA. 15230

**ONCE-THROUGH COOLING WATER SYSTEMS AND WASTE WATER TREATMENT SYSTEMS**

When used as directed, H-940 Microbiocide effectively controls algal, bacterial and fungal slimes and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in once-through fresh and sea water cooling systems and disinfects secondary and tertiary wastewater treatment systems.

**Dosage Rates:**  
Add H-940 Microbiocide to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio.  
For example:

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution;
- 2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) per gallon of sodium bromide solution.

**Initial Dose:** When the system is noticeably fouled, add 0.0008 to 0.049 gallons of H-940 Microbiocide per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.02 to 0.08 lbs. gas chlorine per 1000 gallons contained volume), or sodium hypochlorite solution (0.02 to 0.06 gallons 12.5% sodium hypochlorite solution per 1000 gallons contained volume).

**Subsequent Dose:** When microbial control is evident, add 0.0003 to 0.049 gallons H-940 Microbiocide per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.008 to 0.08 lbs. gas chlorine per 1000 gallons contained volume), or sodium hypochlorite solution (0.006 to 0.06 gallons 12.5% sodium hypochlorite solution per 1000 gallons contained volume).

**Pulp And Paper Mills:** When used as directed, H-940 Microbiocide effectively controls algal, bacterial, and fungal slime in pulp and paper mill fresh and sea water influent water systems, cooling water systems, wastewater treatment systems, nonpotable water systems, and other process water.

**Dosage Rates:**  
Add H-940 Microbiocide to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio.  
For example:

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution;
- 2) 1.3 to 21.2 gallons of sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Feed H-940 Microbiocide either before or after the oxidant injection point into the water to be treated. Be sure rapid mixing of the water, H-940 Microbiocide and oxidant is achieved. Pump manufacturers can recommend the appropriate materials of construction and capacity for a pump to feed H-940 Microbiocide or sodium hypochlorite solution. If used as the oxidant, chlorine gas must be handled and used only in accordance with practices recommended in the chlorine manual published by The Chlorine Institute, Inc., New York. Use chlorine gas only in well ventilated areas.

Treated levels of H-940 Microbiocide and oxidant can best be measured with test kits for either bromine or chlorine. Tests should be made immediately after drawing water samples from the system. Use test kits according to directions.

- 1) When a bromine test kit is used, results can be read directly as ppm bromine.
- 2) When a chlorine test kit is used, results can be expressed in terms of bromine by multiplying chlorine values by the conversion factor 2.25.

Add sufficient H-940 Microbiocide and oxidize with either gas chlorine or sodium hypochlorite solution to achieve a residual bromine level of 0.5 to 5 ppm or as needed to maintain control of the system. H-940 Microbiocide can be added whenever chlorination is applied.

H-940 Microbiocide weighs 11.9 lbs/gal at 70°F.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING:** Irritation may develop from eye and skin exposure. Avoid contact with eyes. Wear gloves and safety goggles. Wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

Do not discharge into lakes, streams, ponds or public water unless in accordance with an NPDES permit. For guidance, contact your regional office of EPA.

**PHYSICAL AND CHEMICAL HAZARDS**

H-940 Microbiocide is not flammable. However, in fires fueled by other materials, hydrogen bromide or bromine may be released. In case of fire, wear self-contained breathing apparatus.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This product is not approved for mollusk control in California.

**RECIRCULATING COOLING WATER SYSTEMS**

When used as directed, H-940 Microbiocide effectively controls algal, bacterial, and fungal slimes and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in commercial and industrial cooling towers; influent water systems such as flow through filters; heat exchange water systems; and industrial water scrubbing systems.

**DOSAGE RATES**

Add H-940 Microbiocide to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:  
1) 1.6 to 26.5 pounds of chlorine gas (59.9%) per gallon of sodium bromide solution.  
2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

**Initial Dose:** When the system is noticeably fouled, add 0.0003 to 0.024 gallons of H-940 Microbiocide per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.040 lbs. gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.007 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

**Subsequent Dose:** When microbial control is evident, add 0.0002 to 0.024 gallons of H-940 Microbiocide per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.004 to 0.040 lbs. gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.003 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

**NOTE:** Seller warrants that this product complies with the specifications expressed in this label. Seller makes no other warranties; and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. Seller's liability for default, breach, or failure under this label shall be limited to the amount of the purchase price. Seller shall have no liability for consequential damages.

For information regarding incidents involving human and environmental exposure, call (412) 777-8000 and ask for the Health and Environmental Affairs Department.

**STORAGE AND DISPOSAL**

**Storage:** Keep product in tightly closed original container when not in use. Store in a dry, well ventilated area. Product should be stored at 0°F. or above.

**Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Triple rinse the container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate. Burn only if allowed by state and local authorities. If burned, stay out of smoke.

Authorized by the USDA for use in federally inspected meat and poultry plants.