

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.

FIRST AID:

In case of contact, immediately flush eyes or skin with plenty of water for a 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.

This product is toxic to fish. Treated effluent should not be discharged 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.

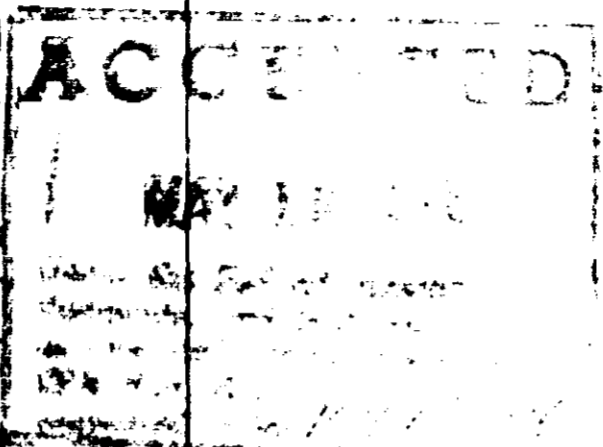
Do not mix with other chemicals, particularly oxidizing agents such as chlorine, since such mixtures can form potentially explosive compounds.

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

9088-435



SUBSIDIARY OF MERCK & CO., INC.



B-60

MICROBIOCIDES

TWIN-CHAIN QUATERNARY AMMONIA COMPOUND WATER TREATMENT MICROBIOCIDES FOR OILFIELD SUBSURFACE WATER INJECTION SYSTEMS AND INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Active Ingredients:

Didecyl Dimethyl Ammonium Chloride...20.0%

Isopropyl Alcohol..... 8.0%

Inert Ingredients.....72.0%

DANGER: KEEP OUT OF REACH OF CHILDREN

See left panel for additional precautionary statements

E.P.A. Registration No. 10445-14

E.P.A. Establishment No. 10445-PA-1

Net Weight 435 Lbs./Gross Weight 483 Lbs.

**B-60
MICROBIOCIDES**

CALGON CORPORATION

CALGON CENTER · PITTSBURGH, PA. 15230



SUBSIDIARY OF MERCK & CO., INC.

90880

USE DIRECTIONS

To control sulfate-reducing bacteria in oilfield water injection systems and to control algae and bacterial slimes in recirculating water cooling towers, use B-60 as directed. Best results are obtained when slug fed. Frequency of addition of a microbiocide depends on many factors. Follow this procedure to optimize your use of B-60.

Apply at a point in the system where the product will be uniformly mixed.

FOR INJECTION SYSTEMS

Slug feed 25-100 ppm B-60 (1.0 to 4.0 gallons B-60 per 1,000 barrels water to be treated).

Slug additions should be for a minimum of four hours each day, more frequently if needed to obtain desired results.

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

1. Slug feed 20 fluid ounces of B-60 per 1,000 gallons of water to be treated (31 ppm active quaternary). Repeat every seven days or increase frequency if needed.
2. When above treatment is successful, use 5.0 to 7.5 fluid ounces B-60 per 1,000 gallons of water to maintain control. Repeat weekly or as needed.

Should slime develop again, go back to initial dosage. If system is heavily fouled, a precleaning is required.

Made in U.S.A.

B-60

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**B-60
MICROBIOCIDES**

description

B-60 Microbiocide is a broad-range liquid organic formulation based on a quaternary ammonium compound. It is especially effective for controlling sulfate-reducing bacteria in oilfield subsurface water injection systems.

B-60 Microbiocide prevents accumulation of microbiological growth and control of microbial corrosion in subsurface water injection systems in oilfield operations. It is highly effective against sulfate reducers (Desulfovibrio desulfuricans).

- Fast bactericidal action
- Compatible with most oilfield waters
- Will gradually remove existing microbiological deposits
- Highly surface active
- Liquid formulation is easy to handle and apply
- Maintains bacterial activity in the presence of organic matter

To control sulfate-reducing bacteria in oilfield water injection systems and to control algae and bacterial slimes in recirculating water cooling towers, best results are obtained by slug feeding B-60.

The following procedures should be used to optimize treatment effectiveness.

Injection Systems: Slug feed 25 to 100 ppm B-60. This concentration is obtained by using 1.0 to 4.0 gallons of B-60 Microbiocide per 1000 barrels of water to be treated. Slug additions should be for a minimum of four hours each day, more frequently if needed to obtain desired results. Point of application should be upstream of common problem areas such as filters, storage tanks and stagnant or semi-stagnant sections of system piping.

Recirculating Water Cooling Towers: Begin treatment when system is in jeopardy of becoming affected or after cleaning systems whose efficiency is already impaired. Slug feed 20 fluid ounces of B-60 Microbiocide per 1000 gallons of water to be treated. This provides a concentration of 31 ppm active quaternary. Apply at a point in the system where the product will be uniformly mixed. Repeat weekly or increase frequency as needed to obtain desired results. After treatment at a concentration of 31 ppm has brought biological growth under control, reduce concentration to 5.0 to 7.5 fluid ounces of B-60 Microbiocide per 1000 gallons of water to maintain treatment. Repeat weekly or as needed. If slime develops 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.

Specific feed rates and treatment frequency requirements, however, can vary considerably depending on the severity of any existing problems and the size, condition and operating parameters of a particular system. Your Calgon representative will assist in determining exact feed and treatment frequency required.

10445-14

and feed systems suitable for application of 15-60 microbicides. Based on specific requirements, your Calgon representative can specify the proper feed equipment.

specifications.

appearance light, straw-colored liquid
specific gravity @ 25 C 1.0
weight per gallon 8.3 lbs
flash point (TOC) 118 F
pH as supplied 6.3
freeze point product will not freeze at temperatures to 20 F

DANGER -- Keep out of reach of children. Harmful or fatal if swallowed. 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.

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.

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Available in 55-gallon lined steel drums, 440 lbs. net, 488 lbs. gross. Freight classification: Disinfectant, N.O.L., O/T medicinal and O/T toilet preparations. E.P.A. Registration No.

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

