

464-660

5/2/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



Office of Pesticide Programs

Abigial Trueblood
The Dow Chemical Company
1803 Building
Midland, MI
48674

MAY -2 2012

Subject: Bioban CS-1135 Antimicrobial Agent
EPA Registration No: 464-660
Application Date: April 10, 2012
Receipt Date: April 10, 2012

Dear Ms. Trueblood:

The following Amendment submitted In connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended to change your guarantee statement is acceptable. A stamped copy of the label is enclosed for your record

If you have any questions concerning this letter, please contact Zebora Johnson at (703) 308-7080.

Sincerely

A handwritten signature in cursive script, appearing to read "M. Swindell".

Marshall Swindell
Product Manger (33)
Regulatory Management Branch I
Antimicrobial's Division (7501P)

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BIOBAN™ CS-1135 Antimicrobial FOR CONTROL OF BACTERIA IN AQUEOUS SYSTEMS

Active Ingredient(s):

4,4-Dimethyloxazolidine. 76.0 % by wt.

Inert Ingredients 24.0 % by wt

Total 100%

E.P.A. Registration No. 464- 660

E.P.A. Est. XXXX-XX-X

KEEP OUT OF REACH OF CHILDREN

DANGER

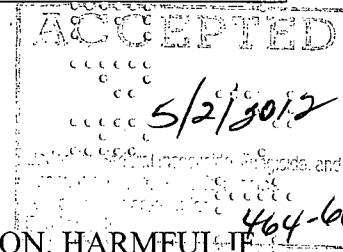
	FIRST AID
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 30 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.
IF ON SKIN	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance and then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment.
HOT LINE NUMBER	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (989) 636-4400. Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED. COMBUSTIBLE LIQUID.

Do not get in eyes, on skin, on clothing. Avoid breathing vapor or spray mist. Wear goggles or face shield and chemical resistant rubber gloves when handling. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove



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contaminated clothing and wash before reuse. Remove personal protective equipment and launder or otherwise decontaminate it immediately after use. Do not use or store near heat or open flame.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal

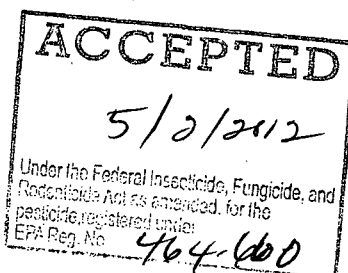
PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Container: Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling, if available; or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.

Option to Use for Refillable Containers:

Refillable Container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning of the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty contents into application equipment and triple rinse. Pour or pump rinsate into application equipment or rinsate collection system. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.



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DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

USE IN PAINTS, INKS, AND EMULSIONS

BIOBAN CS-1135 is effective as a preservative in water-containing systems, such as latex paints and inks and resin emulsions at a concentration of 0.1 to 0.5 lb per 100 lb total formulation weight. BIOBAN CS-1135 may be added at any point in the manufacturing cycle. The recommended rate for preservation of inks and latex paints is 0.1 to 0.2 lb per 100 lb of the formulation. The recommended rate for preservation of resin emulsions is approximately 0.2 lb per 100 lb of the formulation.

USE IN ADHESIVES (NON-FOOD CONTACT)

For control of microbial contamination, add 0.1 to 0.5 lb of BIOBAN CS-1135 per 100 lb total formulation weight.

OIL AND GAS PRODUCTION

USE IN PRESERVING DRILLING MUDS AND WORKOVER AND COMPLETION FLUIDS

Determine the volume of BIOBAN CS-1135 necessary to provide a concentration of 500-1000 ppm by weight of BIOBAN CS-1135 in the drilling mud system, workover and completion fluid. For example, 21-42 gallons of BIOBAN CS-1135 per each 1000 barrels of drilling mud provides this concentration. As the system circulates, add the BIOBAN CS-1135 in a thin stream. Add additional BIOBAN CS-1135 to the system to maintain the proper concentration as the total volume of the system increases.

USE IN OILFIELD AND GAS WATER INJECTION SYSTEMS

For controlling aerobic slime-forming bacteria (*Pseudomonas sp.*) or iron-oxidizing bacteria (*Gallionella sp.*) and anaerobic sulfate-reducing bacteria (*Desulfovibrio desulfuricans*) in oilfield and gas water systems, such as subsurface injection water, add 5-150 ppm of BIOBAN CS-1135, depending on the severity of the contamination. Additions should be made with a metering pump at the free water knockouts before or after the injection pumps or prior to injection well headers.

Continuous-feed method: If the system is noticeably fouled, add 20-150 ppm BIOBAN CS-1135 (1.7-12.8 gal per 2000 barrels of water) continuously until the desired degree of control is achieved. Subsequently treat with 5-150 ppm BIOBAN CS-1135 (0.43-12.8 gal per 2000 barrels of water) continuously as needed to maintain control. For hydraulic fracturing injection water, continuously feed to achieve 100-250 ppm BIOBAN CS-1135 (4.2-10.5 gal. per 1000 barrels of water).

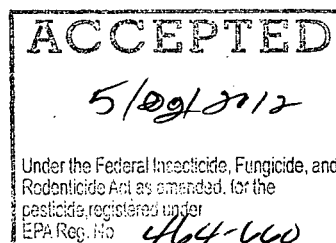
Intermittent or slug method: If the system is noticeably fouled or to maintain control of the system, add 20-150 ppm BIOBAN CS-1135 (1.7-12.8 gal per 2000 barrels of water) intermittently for 2-8 hours per day, 1-4 days per week, depending on the severity of contamination.

USE IN METALWORKING FLUIDS

In diluted fluids: A concentration of 1000-2000 ppm of BIOBAN CS-1135 is sufficient to control gross microbial growth. Add 1.0 to 2.0 pints of BIOBAN CS-1135 per each 100 gallons of fluid.

Maintenance dosage: Add 250-500 ppm BIOBAN CS-1135 weekly as required to maintain control of the system. The addition of 8 ounces (1 cup) of BIOBAN CS-1135 to each 100 gallons of fluid will provide 500 ppm concentration.

In concentrates: BIOBAN CS-1135 may be incorporated in metalworking fluid concentrate by the manufacturer. BIOBAN CS-1135 normally will be stable in concentrates as long as the pH is maintained above 6. However, long-term stability studies should be carried out by the manufacturer on his specific formulations to ensure that the concentrate does not contain ingredients incompatible with BIOBAN CS-1135 stability. The amount to be incorporated will depend on the dilution factor recommended to be used when the concentrate is diluted for use. For efficient bacteriostatic activity, a concentration of 1000 to 2000 ppm of BIOBAN CS-1135 in the diluted fluid is suggested.



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USE IN DIE-CAST LUBRICANTS AND MOLD-RELEASE AGENTS

To control the growth of microorganisms in fluids used as lubricants in metal die-cast applications and mold-release agents used in the manufacture of plastics.

In Diluted Fluids: A concentration of 1000-2000 ppm of BIOBAN CS-1135 is sufficient to control gross microbial growth. Add 1.0 to 2.0 pints of BIOBAN CS-1135 per each 100 gallons of fluid.

Maintenance Dosage: Add 250- 500 ppm BIOBAN CS-1135 weekly as required to maintain control of the system. The addition of 8 ounces (1 cup) of BIOBAN CS-1135 per each 100 gallons of fluid will provide a 500 ppm concentration.

In Concentrates: BIOBAN CS-1135 may be incorporated in fluid concentrate by the manufacturer.

BIOBAN CS-1135 normally will be stable in concentrates as long as the pH is maintained above 6.

However, long-term stability studies should be carried out by the manufacturer on his specific formulation to ensure that the concentrate does not contain ingredients incompatible with BIOBAN CS-1135 stability.

The amount to be incorporated will depend on the dilution factor recommended to be used when the concentrate is diluted for use. For efficient bacteriostatic activity, a concentration of 1000-2000 ppm of BIOBAN CS-1135 in the diluted fluid is suggested.

NOT APPROVED FOR USE IN CALIFORNIA

CONSUMER, HOUSEHOLD AND INSTITUTIONAL PRODUCTS

To inhibit bacterial spoilage during the production and shelf-life storage and use of consumer, household and institutional products, including dishwashing liquids, laundry cleaners, fabric softeners, surface cleaners, cleaning wipes, polishes, and car care products. Dose at 0.04 to 0.2 lb per 100 lb (400-2000 ppm). Not for use where contact with food will occur.

MINERAL SLURRIES

For control of microbial contamination in mineral slurries, add 0.04 to 0.2 lb per 100 lb slurry (400-2000 ppm) BIOBAN CS-1135.

SURFACTANTS

To inhibit bacterial spoilage during shelf-life storage and the use of bulk anionic, nonionic amphoteric and cationic surfactants when supplied for the manufacture of industrial and consumer products. BIOBAN CS-1135 should be dosed at 0.04-0.2 lb per 100 lb based on the final formulation volume.

Notice: Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.

NET WT:

LOT:

Produced for:

THE DOW CHEMICAL COMPANY
Midland, Michigan 48674 USA
(989)636-4400

