

464-660

11-21-2006

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



United States  
Environmental Protection  
Agency

Office of Pesticide Programs

The Dow Chemical Company  
1803 Building  
Midland, MI 48674

NOV 21 2006

Attention: Abigail Trueblood  
Regulatory Specialist

**Subject: BIOBAN CS-1135 Antimicrobial**  
EPA Registration No. 464-660  
Notification Dated November 3, 2006

This will acknowledge receipt of your notification addition of the qualifier "Produced for" above the company name, submitted under the provisions of FIFRA Section 3(c)(9). Based on a review of the submitted material, the following comments apply.

The Notification is in compliance with PR Notice 98-10 and is acceptable. This information has been made a part of your file.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely

A handwritten signature in black ink, appearing to read "M. Swindell".

Marshall Swindell  
Product Manager (33)  
Regulatory Management Branch 1  
Antimicrobials Division (7510P)



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

## Application for Pesticide - Section I

|                                                                                                                                                                                      |                                                                                                                                                                                         |                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1. Company/Product Number<br>464-660                                                                                                                                                 | 2. EPA Product Manager<br>M. Swindell                                                                                                                                                   | 3. Proposed Classification<br><input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted |
| 4. Company/Product (Name)<br>BIOBANCS-1135 Antimicrobial                                                                                                                             | PM#<br>33                                                                                                                                                                               |                                                                                                            |
| 5. Name and Address of Applicant (Include ZIP Code)<br>The Dow Chemical Company<br>1803 Building<br>Midland, MI 48674<br><br><input type="checkbox"/> Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:<br>EPA Reg. No. _____<br><br>Product Name _____ |                                                                                                            |

## Section - II

|                                                                                |                                                                                        |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Amendment - Explain below.                            | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.                                         |
| <input checked="" type="checkbox"/> Notification - Explain below.              | <input type="checkbox"/> Other - Explain below.                                        |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Addition of the qualifier "Produced for" above the company name  
Please see attached sheet for additional information

## Section - III

|                                                                                                                                                                                |                                                                                          |                                                                                                   |  |                                                                                                                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Material This Product Will Be Packaged In:                                                                                                                                  |                                                                                          |                                                                                                   |  | 2. Type of Container                                                                                                                         |  |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No                                                                            | Unit Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No |  | <input checked="" type="checkbox"/> Metal                                                                                                    |  |
| * Certification must be submitted                                                                                                                                              |                                                                                          |                                                                                                   |  | <input type="checkbox"/> Plastic                                                                                                             |  |
| If "Yes" Unit Packaging wgt. No. per container                                                                                                                                 |                                                                                          | If "Yes" Package wgt. No. per container                                                           |  | <input type="checkbox"/> Glass                                                                                                               |  |
|                                                                                                                                                                                |                                                                                          |                                                                                                   |  | <input type="checkbox"/> Paper                                                                                                               |  |
|                                                                                                                                                                                |                                                                                          |                                                                                                   |  | <input type="checkbox"/> Other (Specify) _____                                                                                               |  |
| 3. Location of Net Contents Information<br><input type="checkbox"/> Label <input checked="" type="checkbox"/> Container                                                        |                                                                                          | 4. Size(s) Retail Container<br>55 gal and 5 gal                                                   |  | 5. Location of Label Directions<br><input checked="" type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |  |
| 6. Manner in Which Label is Affixed to Product<br><input checked="" type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |                                                                                          | <input type="checkbox"/> Other _____                                                              |  |                                                                                                                                              |  |

## Section - IV

|                                                                                                                                                                                                                                                                                    |                                   |                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)                                                                                                                                      |                                   |                                                   |
| Name<br>Abigail Trueblood                                                                                                                                                                                                                                                          | Title<br>Regulatory Specialist    | Telephone No. (Include Area Code)<br>847-808-3555 |
| <b>Certification</b><br>I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. |                                   | 6. Date Application Received<br>(Stamped)         |
| 2. Signature<br><i>Abigail Trueblood</i>                                                                                                                                                                                                                                           | 3. Title<br>Regulatory Specialist |                                                   |
| 4. Typed Name<br>Abigail Trueblood                                                                                                                                                                                                                                                 | 5. Date<br>11/2/16                |                                                   |

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA.



November 3, 2006

4/6  
The Dow Chemical Company  
1801 E. Lake Court Road  
Dow Chemical Company  
USA

Mr. Marshall Swindell/ PM33  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Antimicrobials Division  
One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Re: Notification of Addition of Qualifier "Produced for"  
above Company Name  
**BIOBAN™ CS-1135 Antimicrobial (EPA Reg. No. 464-660)**

Dear Mr. Swindell:

The Dow Chemical Company (Dow) seeks to notify USEPA of the following change to the product label for BIOBAN CS-1135 Antimicrobial:

- addition of qualifier "Produced for" above the company name

Enclosed are the following:

- EPA Form 8570-1, *Application for Registration* (with attached sheet)
- One copy of the proposed label with changes highlighted

If you have any questions concerning this submission, please contact me.

Sincerely,

Abigail Trueblood  
Regulatory Specialist  
[atrueblood@dow.com](mailto:atrueblood@dow.com)  
(847)-808-3555

# BIOBAN\*\* CS-1135 Antimicrobial

## FOR CONTROL OF BACTERIA IN AQUEOUS SYSTEMS

Active Ingredients:  
4,4-Dimethyloxazolidine ..... 78.0%  
Inert Ingredients ..... 22.0%  
Total ..... 100%  
E.P.A. Registration No. 464-660  
E.P.A. Est.

KEEP OUT OF REACH OF CHILDREN

## DANGER

### 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  
Thoroughly With Soap And Water Immediately After  
Handling • Remove Contaminated Clothing And Wash Before  
Reuse • Reserve Personal Protective Equipment And Launder  
or Otherwise Decontaminate It Immediately After Use • Do Not  
Use Or Store Near Heat Or Open Flame

Produced for:



**THE DOW CHEMICAL COMPANY**  
Midland, Michigan 48674 U.S.A.  
(989)636-4400

\* Trademark of THE DOW CHEMICAL COMPANY

| FIRST AID:                                                                                                                                                                                                                   |                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF IN EYES:                                                                                                                                                                                                                  | • Hold eye open and rinse slowly and gently with water for 15-20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes.<br>• Call a poison control center or doctor for treatment advice.                            |
| IF SWALLOWED:                                                                                                                                                                                                                | • Call a poison control center immediately for treatment advice.<br>• Have a person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told by the poison control center or doctor.                              |
| IF ON SKIN:                                                                                                                                                                                                                  | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15-20 minutes.<br>• Call a poison control center or doctor for treatment.                                                                          |
| IF INHALED:                                                                                                                                                                                                                  | • Move person to fresh air.<br>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.<br>• Call a poison control center or doctor for further treatment advice. |
| NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.                                           |                                                                                                                                                                                                                                           |
| 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. |                                                                                                                                                                                                                                           |

### 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

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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 (except uses for which USEPA has accepted the required data and/or claims of data that the formulator has submitted in support of registration) when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT 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.

### DIRECTIONS FOR USE

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

### USE IN PAINTS, INKS, AND EMULSIONS

BIOBAN CS-1135 is effective as a preservative in water-containing systems, such as latex paints and latex 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 latex 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.

### USE IN OILFIELD WATER SYSTEMS

For controlling aerobic slime-forming bacteria (*Pseudomonas* sp.) or iron-oxidizing bacteria (*Gallionella* sp.) and anaerobic sulfate-reducing bacteria (*Desulfovibrio desulfuricans*) in oilfield 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 knockout before or after the injection pumps and injection well headers.

Continuous-feed method: If the system is noticeable fouled, add 30-180 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 (0.49-12.8 gal per 2000 barrels of water) continuously as needed to maintain control.

Intermittent or slug method: If the system is noticeable 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 on from 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 concentrates by the manufacturer. BIOBAN CS-1135 normally will be stable in concentrates as long as the pH is maintained above 8. 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.

### FOR 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 DIE-CAST LUBRIC AGENTS

To control the growth of micro in metal die-cast applications manufacture of plastics.

In Diluted Fluids: A concentration of 1000-2000 ppm of BIOBAN CS-1135 is sufficient to control gross microbial growth.

Maintenance Dosage: Add 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 die-cast lubricant concentrates by the manufacturer. BIOBAN CS-1135 normally will be stable in concentrates as long as the pH is maintained above 8. 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.

### Not Approved For

CONSUMER, HOUSEHOLD PRODUCTS

To inhibit bacterial spoilage due to storage and use of consumer, including dishwashing liquids, and polishes. Dose at 0.04 to 0.1 lb per 100 lb of product.

### MINERAL SLURRIES

For the control of microbial on 0.04 to 0.2 lb per 100 lb of slurry.

### SURFACTANTS

To inhibit bacterial spoilage due to bulk storage, nonionic surfactant supplied for the manufacture of BIOBAN CS-1135 should be at the final formulation volume.

**FLAMMABLE  
(4,4-DIMET)**

Apply  
wTex

# AN\*\* CS-1135 Antimicrobial

## BACTERIA EMS

..... 78.0%  
..... 22.0%  
..... 100%

164-560

## OF CH'DREN

## MENTS

Domestic Animals

Eye

IRRITATION -

OWED,

1 SKIN OR

IBLE LIQUID

Using - Avoid Breathing  
or Face Shield And  
When Handling - Wash  
Immediately After  
Handling and Wash Before  
Equipment And Launder  
Clothing After Use - Do Not

AL C' ANY  
U.S.A.

IMICAL COMPANY

| FIRST AID:                                                                                                                                                                                                                    |                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF IN EYES:                                                                                                                                                                                                                   | • Hold eye open and rinse slowly and gently with water for 15-20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes.<br>• Call a poison control center or doctor for treatment advice.                            |
| IF SWALLOWED:                                                                                                                                                                                                                 | • Call a poison control center immediately for treatment advice.<br>• Have a person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told by the poison control center or doctor.                              |
| IF ON SKIN:                                                                                                                                                                                                                   | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15-20 minutes.<br>• Call a poison control center or doctor for treatment.                                                                          |
| IF INHALED:                                                                                                                                                                                                                   | • Move person to fresh air.<br>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.<br>• Call a poison control center or doctor for further treatment advice. |
| NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.                                            |                                                                                                                                                                                                                                           |
| HOT LINE NUMBER                                                                                                                                                                                                               |                                                                                                                                                                                                                                           |
| IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (800) 538-4400. Have the product container or label with you when calling a poison control center or doctor or going for treatment. |                                                                                                                                                                                                                                           |

### 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 residue 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

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Notice: Seller warrants that the product conforms to the chemical description as contained on this label and is reasonably fit for the purposes stated on this label (except uses for which USEPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration) when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT 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.

#### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with the 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 latex and ink 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.

#### USE IN OILFIELD WATER SYSTEMS

For controlling aerobic slime-forming bacteria (*Pseudomonas* sp.) or iron-oxidizing bacteria (*Gallionella* sp.) and anaerobic sulfate-reducing bacteria (*Desulfovibrio desulfuricans*) in oilfield 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 knockout before or after the injection pumps and injection well headers.

Continuous-feed method: If the system is noticeable fouled, add 20-150 ppm BIOBAN CS-1135 (1.7-12.5 gal per 2000 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 5-150 ppm BIOBAN CS-1135 (0.45-12.5 gal per 2000 barrels of water) continuously as needed to maintain control.

Intermittent or slug method: If the system is noticeable fouled, or to maintain control of the system, add 20-150 ppm BIOBAN CS-1135 (1.7-12.5 gal per 2000 barrels of water) intermittently for 2-8 hours per day on from 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 8. 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.

#### FOR USE IN PRESERVING DRILLING MUDS AND WORKOVER AND COMPLETION FLUIDS

Determine the volume of BIOBAN CS-1135 necessary to provide a concentration of 100-1000 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 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 8. 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.

#### 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, surface cleaners, laundry cleaners and polishes. 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 the 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.

#### FLAMMABLE LIQUID N.O.S. (4,4-DIMETHYLOXAZOLIDINE)

UN1993

Apply Flammable Liquid 3  
wText and Number label.

1/10