# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

4 1991 DEC

Angus Chemical Company 2211 Sanders Road Northbrook, IL 60062

Attention: Allen F. Bollmeier

Gentlemen:

Subject: Bioban CS-1135

EPA Registration Number 48301-8 Your Submission Dated May 9, 1991 EPA Received Date September 20, 1991

The labeling referred to above, submitted in connection with registration under registration under the Federal Insecticide, Fungicide, and Rodenticide Act is acceptable.

A stamped copy of the labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Karen M. Leavy at (703)-557-3966.

Sincerely Yours,

John H. Lee Product Manager-31

Antimicrobial Program Branch

Registration Division (H7505-C)

CONCURRENCES								
SYMBOL								
SURNAME )	***********							
DATE				<u> </u>				
EPA Form 1320-1 (12-70)		*II.S.GPO:1989-624-485/10186					OFFICIAL FILE COPY	

## BIOBAN® CS-1135 Preservative

Active Ingredient:

4,4-Limethyloxazoldine Inert Ingredients:

73.7%

26.3%

Total

100.0%

# PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

#### DANGER!

Causes Eye Damage and Skin Irritation Harmful if Inhaled or Swallowed Combustible Liquid

Do not get in eyes, on skin, on clothing. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Avoid contamination of food. Do not take internally. 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 public waters unless in accordance with the appropriate NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of wastes.

# KEEP OUT OF REACH CF CHILDREN DANGER!

#### Statement of Practical Treatment

If in Eyes: Flush with plenty of water for at least 15 minutes. Call a physician.

If on Skin: Wash thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Discard contaminated shoes.

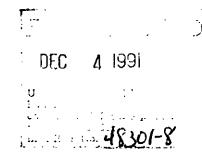
If Swallowed: Drink promptly a large quantity of milk, egg whites, or gelatin solution; if these are not available, drink large quantities of water; avoid alcohol. Call a physician immediately.

Note to Physician

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsions may be needed.

EPN. Reg. No. 48301-8 EPA Est. No. 48301-LA-1

ANGUS Chemical Company 2211 Sanders Road Northbrook, IL 60062



## DIRECTIONS FOR USE

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

#### 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.

## 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 1000 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 paint 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 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 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 and 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 2,000 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 2,000 barrels of water) continuously as needed to maintain control.

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 2,000 barrels of water) intermittently for 2-8 hours per day from 1-4 days per week, depending on the severity of contaminat on.

## USE IN METALWORKING FLUIDS

In Diluted Fluids: A concentration of 1,000-2,000 ppm 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 a 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 ciluted for use. For efficient bacteriostatic activity, a concentration of 1,000-2,000 ppm of BIOBAN CS-3135 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 500-1,000 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 1,000 barrels of drilling mud provides this concentration.

As the system circulates, add the BIOBAN CS-1135 in mathin stream.

Add additional BIOBAN CS-1135 to the system to maintain the proper concentration as the total volume of the system increases.

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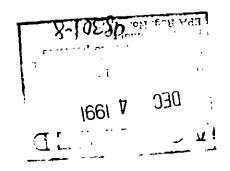
### USE IN DIE CAST LUBRICANTS AND MOLD-RELEASE AGENTS

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 1,000-2,000 ppm 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 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 h's 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 1,000-2,000 ppm of BIOBAN CS-1135 in the diluted fluid is suggested.



1