

# BIOBAN P-1487™

## ANTIMICROBIAL AGENT

### Active Ingredient:

4-(2-Nitrobutyl)morpholine . . . 81% by wt  
4,4'-(2-Ethyl-2-nitrotrimethylene)

dimorpholine . . . . . 5% by wt

Inert Ingredients: . . . . . 14% by wt  
Total 100%

E.P.A. Registration No. 464-659

E.P.A. Est. 48301-LA-1

**KEEP OUT OF REACH OF CHILDREN**

## DANGER

### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

**CAUSES SEVERE EYE DAMAGE AND SKIN BURNS • MAY CAUSE ALLERGIC SKIN REACTION • HARMFUL OR FATAL IF SWALLOWED OR ABSORBED THROUGH THE SKIN**

Do Not Get In Eyes, On Skin, On Clothing • Causes Skin Sensitization • 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



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

1-800-258-CHEM

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77117-10/11/2001-1749 Active

### FIRST AID:

**If in eyes:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

**If swallowed:** Call a poison control center or doctor immediately or 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.

**If on skin:** 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:** Move person to fresh air. If person is not breathing, Call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment.

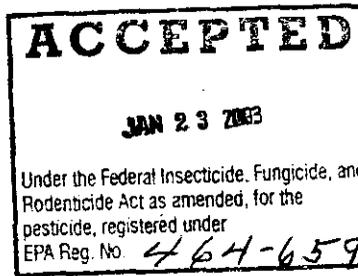
**Note to physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

### 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 of Regional Office of the EPA.

**IN CASE OF AN EMERGENCY** endangering life or property involving this product, call collect 989-636-4400.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. 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.

### DIRECTIONS FOR USE

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

### FOR USE IN METALWORKING FLUIDS DIE CAST LUBRICANTS, AND MOLD-RELEASE AGENTS

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

**In concentrates.** BIOBAN P-1487 is soluble in organic solvents and may be incorporated by the manufacturer in the fluid concentrate. It normally will be stable in such concentrates as long as the pH is maintained above 6. However, long-term stability tests should be carried out by the manufacturer on his specific formulations to ensure that the concentrate does not contain ingredients incompatible with BIOBAN P-1487 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 ppm in the diluted fluid is suggested.

**In diluted fluid.** An initial concentration of 1000 ppm of BIOBAN P-1487 is normally sufficient to control gross microbial contamination of freshly diluted fluids for a period of several weeks at ambient temperatures. The degree of control is influenced by the composition of the fluid, the pH, the conditions of use, and other factors. Under conditions of severe microbial contamination, a concentration of BIOBAN P-1487 as high as 3000 ppm may be required temporarily.

**Maintenance dosage.** Periodic addition of BIOBAN P-1487 to the fluid will extend its activity in controlling gross microbial contamination after the initial charge. Additions of 100 ppm to 200 ppm of BIOBAN P-1487 at weekly intervals usually are recommended.

**Note.** Transitory eye irritation can occur from exposure to vapors produced during the use of fluids containing BIOBAN P-1487. Should eye irritation occur, further exposure should be prevented by vacating the area or by using protective goggles.

### FOR USE IN HYDROCARBON PRESERVATION

To control the growth of problem microorganisms associated with the fuel.

**In general use.** Add BIOBAN P-1487 to storage tanks or fuel tanks for control of microbial growth in diesel oil, fuel oil, gasoline, or kerosene. Treatment may be performed by slug dosage or by intermittent metering to attain a concentration of 135-1000 ppm of BIOBAN P-1487.

**For storage above water.** Add 1 gallon of BIOBAN P-1487 to each 1000 gallons of water in the bulk storage system to achieve a concentration of approximately 1000 ppm. To facilitate mixing, dissolve each gallon of BIOBAN P-1487 in 100 gallons of water and add this solution directly to the water phase in the tank with minimal agitation.

**For storage in tanks without intentional water.** Add 0.125-1 gallon of BIOBAN P-1487 directly to each 1000 gallons of hydrocarbon in the system to obtain a concentration of approximately 135-1000 ppm.

**In a fuel-treatment pre-mix.** BIOBAN P-1487 may be mixed with other fuel additive for addition to fuel. The end user must add sufficient BIOBAN P-1487 to the pre-mix to provide 135-1000 ppm of BIOBAN P-1487 in the treated fuel.

### FOR USE IN ADHESIVE AND INDUSTRIAL EMULSIONS (NON-FOOD USE)

For control of microbial contamination in resin, latex or other water based emulsions, asphalt emulsions or inhibit the growth of microorganisms in adhesives, add 0.025-0.1% (250-1000 ppm) BIOBAN P-1487. The addition of BIOBAN P-1487 should be made as a final step in the manufacturing process after any heating and when the product has cooled to below 100°F.

### FOR USE IN INKS (NON-FOOD USE)

To inhibit the growth of microorganisms during storage or use of water-based inks.

**In can preservation.** Add BIOBAN P-1487 in the final step of the manufacturing process, after any heating and when the product has cooled to below 110°F. BIOBAN P-1487 should be added at 250-1000 ppm based on the final formulation volume. BIOBAN P-1487 may be added press side at a concentration of 250-1000 ppm.

### FOR USE IN PAINT SPRAY BOOTH WASH WATER

BIOBAN P-1487 is used to control the growth of microorganisms in paint spray booth wash waters. Add tankside and circulate through the system to mix thoroughly. Concentrations of 250-1000 ppm BIOBAN P-1487 should be attained. One gallon of BIOBAN P-1487 to each 1000 gallons of wash water will achieve a concentration of approximately 1000 ppm.

**IN CASE OF AN EMERGENCY** endangering life or property involving this product, call collect 989-636-4400.

**DISINFECTANT LIQUID, TOXIC, N.O.S.**

**(4-(2-NITROBUTYL) MORPHOLINE)**

**UN3142**

Apply Toxic PG III 6 label.

464-659

1-23-2003

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