Reg no: [illegible]

BIOBAN P-1487®

ANTIMICROBIAL AGENT

ACTIVE INGREDIENTS:	
4-(2-Nitrobutyl)morpholine	70% by wt
4,4′-(2-Ethyl-2-nitrotrimethylene)dimorpholine	20% by wt
INERT INGREDIENTS	10% by wt
TOTAL	100%

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER!

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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this active ingredient into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an 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

ANGUS Chemical Company assumes no responsibility when this product is not used in accordance with the instructions [illegible] on this label.

KEEP OUT OF REACH OF CHILDREN

DANGER!

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush with plenty of water for at least 15 minutes. Call a physician immediately.

IF ON SKIN: Wash thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

IF INHALED: Remove immediately to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

IF SWALLOWED: Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, or 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 convulsions may be needed.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONS AND OTHER INFORMATION

EPA REG. NO. 18301-AA

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Printed in U.S.A.

ANGUS Chemical Company
2211 Sanders Road
Northbrook, IL 60062 U.S.A.

In Acc[illegible] [illegible] -2.
Based on [illegible]

DIRECTIONS FOR USE

GENERAL CLASSIFICATION

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

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.

FOR USE IN METALWORKING FLUIDS

To control the growth of microorganisms in the fluid.

In concentrates. BIOBAN P-1487 is soluble in organic solvents and may be incorporated by the manufacturer in the cutting 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 metalworking fluids for a period of several weeks at ambient temperatures. The degree of control is influenced by the composition of the metalworking 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 additions of BIOBAN P-1487 to the metalworking 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 metalworking 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 [illegible] gasoline or kerosene. Treatment may be performed by slug dosage or by intermittent metering to attain a concentration of 250-1000 ppm of BIOBAN P-1487.

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

For storage in tanks without intentional water. Add 0.25-1 gallon of BIOBAN P-1487 directly to each [illegible] hydrocarbon [illegible] a concentration of approximately 250-1000 ppm.

In a fuel-treatment pre-mix. BIOBAN P-1487 may be mixed with other fuel additives for addition to fuel. The end user must add [illegible] BIOBAN P-1487 [illegible] to provide 250-1000 ppm of BIOBAN P-1487 in the treated fuel.

AGRICULTURAL farm buildings and enclosures poultry plants harvested potatoes harvested sweet potatoes mushrooms bee cells and boards harvested fruits harvested vegetables seeds **AQUACULTURAL** fish ponds fish pond equipment maine lobster ponds conditioning live oysters control of scavenger fish in hatchery ponds boat hulls **BEVERAGE PLANTS** breweries fermenting tubs false bottoms washing equipment malting areas aging cellars water supplies carbonated beverage plants water supplies pumps cider plants wineries plant sanitization vessels vats casks presses grape crushers bottles corks mold control tanks grape juice plants **FOOD PROCESSING PLANTS** egg breaking operations cups knives trays breaking rooms freezers pipelines fish processing plants equipment treating packaging pecan cracking and bleaching bacteria control sugar refineries dust collectors vacuum pans sugar bags beet sugar processing canneries coolant water wastes meat processing plants rooms equipment utensils **DAIRY INDUSTRIES** creameries ice cream factories cheese factories milk plants processing equipment weigh tanks pasteurizers homogenizers fillers sanitary piping bottle fillers can fillers tank trucks **INSTITUTIONAL, COMMERCIAL, AND HOME** sanitizing nonporous food contact surfaces sanitizing porous food contact surfaces sanitizing nonporous non-food contact surfaces sanitizing porous non-food contact surfaces disinfecting nonporous non-food contact surfaces general disinfection controlling mold or mildew bathrooms asphalt or wood roofs sidings **SANITIZING DIALYSIS MACHINES** preparing calcium hypochlorite solutions