

47091-13

11/3/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

NOV - 3 2014

Robert Rosenwasser, Agent for
Aurora Specialty Chemistries
1520 Lake Lansing Road
Lansing, MI 48912

Subject: Predator 1020
EPA Registration Number 47091-13
Application Date: September 18, 2014

Dear Mr. Rosenwasser:

The Agency has reviewed your submission in accordance with continuing registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, and determined the action acceptable.

In summary you have submitted an application to add use directions for Oil Field Applications, Enhanced Oil Recovery Fluids, Fracturing Fluids, Water Flood, and Hydrotesting.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter.

After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 1(gg) and its implementing regulation at 40 CFR 152.3. If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions concerning this letter, please contact Tom Luminello by telephone, (703) 308-8075, or by e-mail at luminello.tom@epa.gov.

Sincerely,



Julie Chao
Acting Product Manager 34
Regulatory Management Branch II
Antimicrobials Division (7510P)

PREDATOR 1020

DBNPA

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE: Causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Do not get in eye, or on skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Use with adequate ventilation. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTION EQUIPMENT (PPE):

- Applicators and other handlers must wear:
 - Coveralls worn over long sleeved shirt and long pants.
 - Chemical resistant footwear plus socks.
 - Goggles or face shield.
 - Chemical-resistant gloves (such as barrier laminate, butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride (PVC and viton).
- For mixing/loading: Wear a chemical resistant apron
- For cleaning equipment: Wear a chemical resistant apron

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Requirements

Users must wash hands before drinking, chewing gum, using tobacco, or using the toilet.
Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
Users must remove personal protective equipment immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly.

General Precautions and Restrictions

Do not apply this product in a way that will contact workers or other persons.

WARRANTY

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with label directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.

ACCEPTED

NOV 3 2014

EPA Registration Number: 47091-13

47091-13

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of waste. 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.

CHEMICAL AND PHYSICAL HAZARDS

Reaction with strong reducing agents may be explosive. Avoid mixing.

STORAGE AND DISPOSAL

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

STORAGE

Store in a dark, cool, dry, well-ventilated area, not above 104°F (40°C), in well-closed original containers, away from energy sources, combustible organic materials, oxidizers and moisture.

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 HANDLING

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for recycling, if available. If not, puncture and discard in a sanitary landfill or by other procedures approved by state and local authorities.

(For containers of 5 gallons or less) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/2 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(For containers with capacities greater than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/2 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip it back and forth several times. Empty rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

SPILLS

When handling or dealing with spills, use impact-resistant goggles with side shields, or face shield, wear body-covering clothes, including impervious rubber gloves and boots; use a respirator if misting occurs. Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and disposing as described for pesticide disposal. If drum contents are contaminated or decomposing, isolate unsealed drum in the open or in a well-ventilated area; flood with 10% sodium bicarbonate solution and large volumes of water, if necessary.

KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE

TO MAINTAIN PRODUCT QUALITY, STORE IN THE DARK AT TEMPERATURES BELOW 104°F (40°C).

DO NOT SHIP WITH FOOD, FEEDS, DRUGS, OR CLOTHING
DO NOT SMOKE, DRINK, OR EAT WHEN HANDLING

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label and use strictly in accordance with precautionary statements and directions.

DIRECTIONS FOR TREATING INDUSTRIAL RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS

NOTE: Add PREDATOR 1020 separately to the system. Do not mix it with other additives, so as to avoid decomposition of PREDATOR 1020 due to the high pH of many additive formulations.

Add PREDATOR 1020 to the basin (or any other point of uniform mixing). Additional treatment is begun when the system is in operation. Optimum performance with this product is achieved by continuous or intermittent treatment. If "shock" treatment is used, the slowdown should be discontinued for 24-48 hours.

FOR CONTROL OF BACTERIA

Add (0.12 - 1.22 fluid ounces) (1.12 - 11.9 ppm) of PREDATOR 1020 / 1000 gal. of water in the system depending on the severity of contamination.

INTERMITTENT C
Initial Dose: 11.9 ppm) of PRE achieved.
Subsequent Dose: - (1.9 ppm) or PF needed to maintain biogrowth.

CONTINUOUS FE
Initial Dose: 11.9 ppm) of PRE
Subsequent Dose: (1.2 - 6.1 blowdown. Badly 1

FOR CONTROL C
Add (3.71 - 12.16 water in the system;
INTERMITTENT C
Initial Dose: 118.5 ppm) of PRE achieved.
Subsequent Dose: - (116.5 ppm) of P to maintain control

CONTINUOUS FE
Initial Dose: 118.5 ppm) of PRE
Subsequent Dose: 118.5 ppm) 0.048-12.2 fluid ounces) of water in the sys begun.

DIRECTIONS FOR NOTE: Add PRED so as to avoid de formulations. For t paper and paper pulp or paper proc type of system an point in the system of fiber and water, chesis, save-allis a then treated with necessary for con (0.35-0.50 lb) of P is controlled. Sub: 1020, fion (dry) of Dislodged slime m be activable.
Slightly fouled
PREDATOR 1020 an intermittent bas
THIS PRODUCT
Paper Mills, Shree
paperboard not int

DIRECTIONS FOR
For controlling bac and peripheral eq other contaminatio be added with a r contamination an
PREDATOR 1020.
Add PREDATOR 1 ppm) per 1000 ga reject waters shou (seawater should v before treatment y treatment is begun
FOR CONTROL O
Initial Dose: 11.9 (0.62 - 1.2 fluid c Minimum treatment specified by guide
Subsequent Dose: or (0.31 - 1.2 fluid manufacturer) 315

PREDATOR 1020

DBNPA

A MICROBIOCIDAL BACTERICIDE, FUNGICIDE, ALGAECIDE AND SLIMICIDE, USED IN TREATING RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS, PAPER MILLS, BREWERY PASTEURIZER WATER, METALWORKING CUTTING FLUIDS, NON-POTABLE REVERSE OSMOSIS SYSTEMS, ENHANCED OIL RECOVERY SYSTEMS, AIR-WASHER SYSTEMS, INDUSTRIAL PRESERVATION APPLICATIONS AND PUBLICLY-OWNED TREATMENT WORKS.

ACTIVE INGREDIENT: 2,2-Dibromo-3-nitropropionamide..... 20%
 INERT INGREDIENTS: 80%
 TOTAL: 100%
 10 pounds PREDATOR 1020 liquid per gallon.

KEEP OUT OF REACH OF CHILDREN

DANGER

See side panels for additional precautionary statements

FIRST AID

If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If inhaled	<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 advice.
If on skin or clothing	<ul style="list-style-type: none"> Call a poison control center or doctor for treatment advice. Call 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If swallowed	<ul style="list-style-type: none"> Call 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. YOU MAY ALSO CONTACT 1-800-424-9300 FOR EMERGENCY MEDICAL TREATMENT INFORMATION.	
NOTE TO PHYSICIAN "Probable mucosal damage may contraindicate the use of gastric lavage."	

WASH THOROUGHLY AFTER HANDLING

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of waste. 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.

CHEMICAL AND PHYSICAL HAZARDS

Reaction with strong reducing agents may be explosive. Avoid misting.

STORAGE AND DISPOSAL

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

STORAGE

Store in a dark, cool, dry, well-ventilated area, not above 104°F (40°C), in well-closed original containers, away from energy sources, combustible organic materials, oxidizers and moisture.

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 HANDLING

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for recycling, if available. If not, puncture and discard in a sanitary landfill or by other procedures approved by state and local authorities.

(For containers of 5 gallons or less) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(For containers with capacities greater than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip it back and forth several times. Empty rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

SPILLS

When handling or dealing with spills, use impact-resistant goggles with side shields, or face shield; wear body-covering clothes, including impervious rubber gloves and boots; use a respirator if misting occurs. Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and disposing as described for pesticide disposal. If drum contents are contaminated or decomposing, isolate unsealed drum in the open or in a well-ventilated area; flood with 10% sodium bicarbonate solution and large volumes of water if necessary.

KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE

TO MAINTAIN PRODUCT QUALITY, STORE IN THE DARK AT TEMPERATURES BELOW 104°F (40°C).

DO NOT SHIP WITH FOOD, FEEDS, DRUGS, OR CLOTHING
 DO NOT SMOKE, DRINK, OR EAT WHEN HANDLING

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label and use strictly in accordance with precautionary statements and directions.

DIRECTIONS FOR TREATING INDUSTRIAL RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS

NOTE: Add PREDATOR 1020 separately to the system. Do not mix it with other additives, so as to avoid decomposition of PREDATOR 1020 due to the high pH of many additive formulations.

Add PREDATOR 1020 to the basin (or any other point of uniform mixing). Addition should be made via a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the in-system retention time. Optimum performance with this product is achieved by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hours.

FOR CONTROL OF BACTERIA

Add (0.12 - 1.22 fluid ounces) (1.2 - 11.9 ppm) of PREDATOR 1020 / 1000 gal. of water in the system depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add (0.61 - 1.22 fluid ounces) (6.0 - 11.9 ppm) of PREDATOR 1020 / 1000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add (0.3 - 1.22 fluid ounces) (3.0 - 11.9 ppm) of PREDATOR 1020 / 1000 gal. of water in the system every 4 days, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, add (0.61 - 1.22 fluid ounces) (6.0 - 11.9 ppm) of PREDATOR 1020 / 1000 gal. of water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of (0.12 - 0.61 fluid ounces) (1.2 - 6.0 ppm) of PREDATOR 1020 / 1000 gal. of water in the system lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add (3.71 - 12.16 fluid ounces) (36.2 - 118.5 ppm) of PREDATOR 1020 / 1000 gal. of water in the system, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add (6.1 - 12.2 fluid ounces) (60.0 - 118.5 ppm) of PREDATOR 1020 / 1000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add (3.7 - 12.2 fluid ounces) (36.2 - 118.5 ppm) of PREDATOR 1020 / 1000 gal. of water in the system daily, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, add (6.1 - 12.2 fluid ounces) (60.0 - 118.5 ppm) (0.048-0.095 gal.) of PREDATOR 1020 / 1000 gal. of water in the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of (3.7 - 12.2 fluid ounces) (36.2 - 118.5 ppm) (0.029-0.095 gal.) of PREDATOR 1020 / 1000 gal. of water in the system per day. Badly fouled systems must be cleaned before treatment is begun.

DIRECTIONS FOR TREATING PULP AND PAPER MILL SYSTEMS

NOTE: Add PREDATOR 1020 separately to the system. Do not mix it with other additives, so as to avoid decomposition of PREDATOR 1020 due to the high pH of many additive formulations. For the control of slime-forming bacterial, fungal, and yeast growth in pulp, paper and paperboard mills add PREDATOR 1020 at levels of (0.15-0.50 lb./ton) (dry) of pulp or paper produced. Addition can be continuous or intermittent, depending upon the type of system and the severity of contamination. Addition is via a metering pump at a point in the system that will ensure uniform distribution of PREDATOR 1020 in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chest, furnish chest, save-alls and white-water tanks. Heavily fouled systems must first be boiled out, then treated with (0.15-0.35 lb.) of PREDATOR 1020 (dry) of paper or pulp as necessary for control. Moderately fouled systems should be treated continuously with (0.35-0.50 lb.) of PREDATOR 1020 (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to (0.15-0.35 lb.) of PREDATOR 1020 (dry) of paper on a continuous or intermittent basis as needed for control. Discharged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable.

Slightly fouled systems should be treated continuously with (0.15-0.35 lb.) of PREDATOR 1020 (dry) of paper or pulp, until the slime is controlled, then add an intermittent basis to maintain control.

THIS PRODUCT IS ONLY FOR USE IN NON-FOOD APPLICATION, such as Brown paper, Mills, Sheet, for Corrugated Board, Kraft paper, Newsprint and similar paper/paperboard not intended for food contact.

DIRECTIONS FOR TREATING NON-POTABLE REVERSE OSMOSIS SYSTEMS

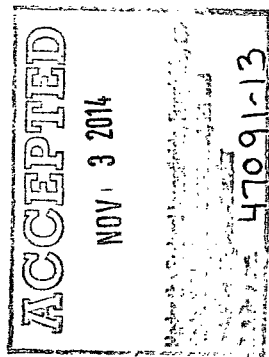
For controlling bacteria, fungi and algae slimes in non-potable Reverse Osmosis systems and peripheral equipment, add PREDATOR 1020 to the system inlet water or before any other contamination area ahead of the Reverse Osmosis unit. PREDATOR 1020 should be added with a metering pump on an intermittent basis depending on the severity of contamination and the guidelines specified by the membrane manufacturer for PREDATOR 1020.

Add PREDATOR 1020 at the rate of (0.12 - 12.3 fluid ounces) (0.01 to 1.0 lbs) (1.2 to 120 ppm) per 1000 gallons of feedwater. During use of PREDATOR 1020 both permeate and reject waters should be directed to the drain. Once treatment is completed, rinsing with feedwater should continue until conductivity values in the permeate are at or below values before treatment with PREDATOR 1020. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF BACTERIA

Initial Dose: When the system is noticeably fouled, add PREDATOR 1020 at the rate of (0.62 - 1.2 fluid ounces) (0.05 to 0.1 lb) (5.0 to 12 ppm) per 1000 gal. of feedwater. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer.

Subsequent Dose: When microbial control is achieved, add PREDATOR 1020 at the rate of (0.31 - 1.2 fluid ounces) (0.025 to 0.1 lb) (3.0 to 12 ppm) per 1000 gal. of feedwater as needed to maintain control or as specified by guidelines recommended by the membrane manufacturer.



DIRECTIONS FOR TREATING PUBLICLY-OWNED TREATMENT WORKS TO CONTROL COLIFORM AND OTHER BACTERIA
 Add PREDATOR 1020 at a concentration of 1.0 to 10.0 ppm by weight of water being treated, depending on the severity and contamination in the system. Addition should be CONTINUOUS and should be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add PREDATOR 1020 to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

TO USE AS A CO-TREATMENT WITH CHLORINE
 Add (0.4 - 1.5 ppm) PREDATOR 1020 by weight of water treated. Chlorination should result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level) Addition should be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. PREDATOR 1020 should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

DIRECTIONS FOR OIL FIELD APPLICATIONS
 For reduction of bacterial contamination and degradation in oil recovery operations, add product to the system at a rate of 30 to 270 ppm depending on the severity of contamination.

DIRECTIONS FOR ENHANCED OIL RECOVERY (EOR) FLUIDS
 Not registered for this use in the State of California
 The product reduces bacterial contamination and degradation of EOR polymers and gels. The product must be added to injection water before polymer addition.
Frequency and Dose: The product must be added at a rate of 30 to 270 ppm. Product must be added at a point to ensure proper mixing.

DIRECTIONS FOR FRACTURING FLUIDS
 Not registered for this use in the State of California
 The product reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. The product must be added to the water storage tanks before gelling and circulated to ensure mixing. The product can be added at the well head for "on-the-fly" fracturing jobs.
Frequency and Dose: The product must be added at a rate of 90 to 270 ppm depending on water quality. Retreat after 48 hours if the frac job is delayed.

DIRECTIONS FOR WATER FLOOD
 Not registered for this use in the State of California
 The product can be used to control slime and corrosion causing bacteria in waters used for secondary oil and gas recovery, if the system is heavily fouled, slug treat at the higher rate to remove biofilm. For maintenance, batch treat two to three times per week.
Frequency and Dose: The product must be added at a rate of 30 to 270 ppm. Product must be added at a point to ensure uniform mixing.

DIRECTIONS FOR HYDROTREATING
 Not registered for this use in the State of California
FOR CONTROL OF BACTERIA
 Water used to hydrotest pipelines or vessels should contain 100 to 1,000 ppm of PREDATOR 1020 per 1,000 gallons water depending on water quality and length of lime the equipment will remain idle.

Manufactured for:

ASC Aurora
 Specialty
 Chemistries
 1520 Lake Lansing Road
 Lansing, MI 48912
 (800) 344-3699

EPA Reg. No. 47091-13
 EPA Est. No. 47091-MI-1

NET CONTENTS _____ GALS. (LBS.)

FOR CONTROL OF FUNGI AND ALGAE
Initial Dose: When the system is noticeably fouled, add PREDATOR 1020 at the rate of (6.2 - 12.2 fluid ounces) (0.5 to 1.0 lb) (60 to 120 ppm) per 1000 gals of feedwater. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer.
Subsequent Dose: When microbial control is achieved, add PREDATOR 1020 at the rate of (3.7 - 12.2 fluid ounces) (0.3 to 1.0 lb) (36 to 120 ppm) per 1000 gals of feedwater as needed to maintain control or as specified by guidelines recommended by the membrane manufacturer.

DIRECTIONS FOR TREATING METALWORKING FLUIDS CONTAINING WATER
 PREDATOR 1020 is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100 to 1:4. For controlling (or inhibiting) the growth of bacteria, fungi and yeasts that may deteriorate metalworking fluids containing water, add this product to the fluid in the collection tank. Additions should be made with a metering pump.

Initial or Slug Dose: When the system is noticeably fouled, add PREDATOR 1020 at the rate of (32 fluid ounces) (0.25 gal) (2.85 lbs) per 1000 gals of metalworking fluid in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add PREDATOR 1020 at the rate of (12.8 - 25.6 fluid ounces) (0.1 to 0.2 gal) (1.06 to 2.12 lbs) per 1000 gals of metalworking fluid per day, or as needed to maintain control. Additions of PREDATOR 1020 product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING BREWERY PASTEURIZER WATER
 For controlling (or inhibiting) the growth of bacteria, fungi and yeasts in brewery pasteurizing water systems, add PREDATOR 1020 at a point in the system to ensure uniform mixing.
Initial or Slug Dose: When the system is noticeably fouled, add PREDATOR 1020 at the rate of (32 fluid ounces) (0.25 gal) (2.65 lbs) per 1000 gals of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add PREDATOR 1020 at the rate of (12.8 - 25.6 fluid ounces) (0.1 to 0.2 gal) (1.06 to 2.12 lbs) per 1000 gals of water per day, or as needed to maintain control. Additions of PREDATOR 1020 product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

DIRECTIONS FOR TREATING AIR-WASHER SYSTEMS
 Add (0.0015-0.095 gallons) PREDATOR 1020 / 1000 gal of water in the system, depending on the severity of contamination, to control slime-forming bacteria and fungi in industrial air-washing systems.
Initial Dose: When the system is noticeably fouled, add (0.003-0.095 gal) (0.38 - 12.2 fluid ounces) (3.8 - 118.5 ppm) gal PREDATOR 1020 / 1000 gal of water in the system.
Subsequent Dose: When microbial control is evident, add (0.0015-0.047 gal) (0.19 - 6.1 fluid ounces) (1.9 - 59 ppm) gal PREDATOR 1020 / 1000 gal of water in the system every 2 days, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD
Initial Dose: When the system is noticeably fouled, add (0.003-0.095 gal) (0.38 - 12.2 fluid ounces) (3.8 - 118.5 ppm) gal PREDATOR 1020 / 1000 gal of water in the system.
Subsequent Dose: Maintain this level by pumping a continuous feed of (0.0015-0.047 gal) (0.19 - 6.1 fluid ounces) (1.9 - 59 ppm) gal PREDATOR 1020 / 1000 gal of water in the system per day. Badly fouled systems must be cleaned before treatment is begun.
NOTE: For use only in industrial air-washer systems that maintain effective mist eliminating components.

DIRECTIONS FOR INDUSTRIAL PRESERVATION APPLICATIONS
 PREDATOR 1020 may be used to reduce microbiological contamination in raw materials and/or products such as: aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions, sizing, caulk, process water, along with specialty industrial products including: inks, polishes, waxes, detergents, and cleansers.
TO REDUCE MICROBIOLOGICAL CONTAMINATION
 Add PREDATOR 1020 to the material or product at a concentration of 25 to 2,000 ppm by weight. This concentration is equivalent to (2.8 to 224.0 fluid ounces) PREDATOR 1020 per 1,000 gallons or (21.4 to 1,712.0 milliliters) PREDATOR 1020 per 1,000 liters. The required concentration will depend on the material being treated and the level of contamination present.