BC-118
DBNPA

A MICROBIOCIDAL BACTERICIDE, FUNGICIDE, ALGAECEIDE AND SLIMECIDE, 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-Dichloro-3-nitropropene .................. 20%
OTHER INGREDIENTS: .................................................. 80%
TOTAL: ................................................................. 100%

10 pounds BC-118 liquid per gallon.

KEEP OUT OF REACH OF CHILDREN
DANGER

FIRST AID
If in eyes: 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.
If inhaled: 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 on skin or clothing: 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 swallowed: Call a 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.
NOTE TO PHYSICIAN
Probable mucous damage may contraindicate the use of gastric lavage.

See side panels for additional precautionary statements and first aid.

Distributed by:
Athlon Solutions
3200 Southwest Freeway
Suite 2700
Houston, TX 77027
713-457-2400

EPA Reg. No. 88714-2-90138
EPA Est. No. 74922-00-01
Transportation Emergency (Spill) Tel: 1-800-424-8300 (CHEMTRAC)
LOT#: NET CONTENTS:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER
CORROSIVE
CAUSES BREVESIBLE EYE DAMAGE
MAY BE FATAL IF SWALLOWED
HARMFUL IF INHALED OR ABSORBED THROUGH SKIN
CAUSES SKIN BURNS
PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS

Do not get in eyes, on skin, or on clothing. In case of contact immediately rinse skin with plenty of water. Get medical attention if irritation persists. Use with adequate ventilation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTION EQUIPMENT (PPE):
-Applicators and other handlers must wear:
  -Gloves worn over long sleeved shirt and long pants.
  -Chemical resistant footware plus socks.
  -Joggers or face shield.
  -Chemical-resistant gloves (such as latex laminate, butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride (PVC and viton).
  -For mixing/blending: 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 Recommendations
Users should wash hands before drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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.

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, feed or land with storage or disposal.

STORAGE
Store in a dark, cool, dry, well-ventilated area, not above 40°F (4°C), in well-closed original containers, away from energy sources, combustible organic materials, oxidizers and moisture.

DISPOSAL
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or container 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 AND DISPOSAL
Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty remaining contents into application or a mix tank. Fill the container 5% 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 the container on its end and tip it back and forth several times. Empty rinse into application equipment or a mix tank or store inside for later use or disposal. Repeat this procedure two more times. Then after for recycling, if available or reconditioning if appropriate, or puncture or dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SKILLS
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 10°F (4°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 BC-118 separately to the system. Do not mix it with other additives, so as to avoid decomposition of BC-116 due to the high pH of many additive formulations. Add BC-116 to the basin (or any other point of uniform mixing). Additions 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 0.0005-0.005 gallons of BC-118 / 1000 gal. of water in the system depending on the severity of contamination. For Control of Slugs:
Initial Dose: When the system is noticeably fouled, add 0.004-0.005 gal. of BC-118 / 1000 gal. of water in the system. Repeat until control is achieved. Subsequent Doses: When microbial control is evident, add 0.002-0.005 gal. of BC-118 / 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 0.004-0.005 gal. of BC-118 / 1000 gal. of water in the system. Subsequent Doses: Maintain this level by pumping a continuous feed of 0.0005-0.004 gal. of BC-118 / 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 0.025 - 0.05 gal/in² BC-118 / 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 0.048 - 0.095 gal of BC-118 / 1000 gal. of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 0.026 - 0.05 gal of BC-118 / 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 0.048 - 0.095 gal of BC-118 / 1000 gal. of water in the system.
Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.029 - 0.095 gal of BC-118 / 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 BC-118 sparingly in the system. Do not mix with other additives, as to avoid decomposition of BC-118 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 BC-118 at levels of 0.15-0.30 lb/in² (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 BC-118 in the mass of fiber and water, such as the beater, Jordan inlet or discharge, broke chests, furnish chests, save-alls and white water tanks. Heavily fouled systems must first be bolted out, then treated with 0.15 - 0.35 lb of BC-118 / 1000 lb (dry) of paper or pulp as necessary for control. Moderately fouled systems should be treated continuously with 0.35 - 0.50 lb of BC-118 / 1000 lb (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.15 - 0.35 lb / (BC-118 / 1000 lb) (dry) of paper or pulp until the slime accumulation is controlled. Discolored 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 BC-118 / 1000 lb (dry) of paper or pulp, until the slime is controlled; then added on an intermittent basis to maintain control.

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 BC-118 to the system inlet water or before any other contamination area ahead of the Reverse Osmosis unit. BC-118 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 BC-118. Add BC-118 at the rate of 0.025 to 0.05 gal/in² (0.1 to 0.2 pomp) per 1000 gal of feedwater. During use of BC-118 both permeate and reject waters should be directed to the drain. Once treatment is completed, mixing with feedwater should continue until conductivity values in the permeate are at or below values before treatment with BC-118. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF BACTERIA
Initial Dose: When the system is noticeably fouled, add BC-118 at the rate of 0.05 to 0.1 lb (0 to 0.1 pomp) 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 BC-118 at the rate of 0.025 to 0.05 lb (0.01 to 0.1 pomp) per 1000 gal of feedwater as needed to maintain control or as specified by guidelines recommended by the membrane manufacturer.

FOR CONTROL OF FUNGI AND ALGAE
Initial Dose: When the system is noticeably fouled, add BC-118 at the rate of 0.5 to 1.0 lb. (0.25 to 1.0 pomp) 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 BC-118 at the rate of 0.3 to 1.0 lb. (0.15 to 0.5 pomp) per 1000 gal of feedwater as needed to maintain control or as specified by guidelines recommended by the membrane manufacturer.

DIRECTIONS FOR TREATING METALWORKING FLUIDS CONTAINING WATER
BC-118 is effective in metalworking fluid concentrates which have been diluted in water at rates of 1:100 to 1:4. For controlling (or inhibiting) the growth of bacteria, fungi and yeasts that may occur in concentrates metalworking fluids containing water, add this product to the fluid in the collection sump. Additions should be made with a metering pump.
Initial or Slug Dose: When the system is noticeably fouled, add BC-118 at the rate of 0.25 gal (9.25 lbs) per 1000 gal of metalworking fluid in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add BC-118 at the rate of 0.1 to 0.2 gal (0.1 to 0.2 lbs) per 1000 gal of metalworking fluid to prevent, or as needed to maintain control. Additions of BC-118 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 BC-118 at a point in the system to ensure uniform mixing. Initial or Slug Dose: When the system is noticeably fouled, add BC-118 at the rate of 0.35 gal (1.25 lbs) per 1000 gal of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add BC-118 at the rate of 0.1 to 0.2 gal (0.1 to 0.2 lbs) per 1000 gal of water per day, or as needed to maintain control. Additions of BC-118 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 ENHANCED OIL RECOVERY SYSTEMS
NOTE: Add BC-118 separately to the system. Do not mix it with other additives, as to avoid decomposition of BC-118 due to the high pH of many additive formulations. Addition of BC-118 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfate-reducing bacteria, yeasts, and fungi in oil field water, polymer or miscella fluids, water-disposal systems, or other hot water systems, add 0.6 - 0.8 gal per 1000 gal of water per day continuously or as needed to maintain control. Addition of BC-118 product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS
NOTE: Add BC-118 separately to the system. Do not mix it with other additives, as to avoid decomposition of BC-118 due to the high pH of many additive formulations. Addition of BC-118 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfate-reducing bacteria, yeasts, and fungi in oil field water, polymer or miscella fluids, water-disposal systems, or other hot water systems, add 0.6 - 0.8 gal per 1000 gal of water per day continuously or as needed to maintain control. Addition of BC-118 product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS
NOTE: Add BC-118 separately to the system. Do not mix it with other additives, as to avoid decomposition of BC-118 due to the high pH of many additive formulations. Addition of BC-118 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfate-reducing bacteria, yeasts, and fungi in oil field water, polymer or miscella fluids, water-disposal systems, or other hot water systems, add 0.6 - 0.8 gal per 1000 gal of water per day continuously or as needed to maintain control. Addition of BC-118 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 BC-118 at a point in the system to ensure uniform mixing. Initial or Slug Dose: When the system is noticeably fouled, add BC-118 at the rate of 0.35 gal (1.25 lbs) per 1000 gal of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add BC-118 at the rate of 0.1 to 0.2 gal (0.1 to 0.2 lbs) per 1000 gal of water per day, or as needed to maintain control. Additions of BC-118 product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS
NOTE: Add BC-118 separately to the system. Do not mix it with other additives, as to avoid decomposition of BC-118 due to the high pH of many additive formulations. Addition of BC-118 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfate-reducing bacteria, yeasts, and fungi in oil field water, polymer or miscella fluids, water-disposal systems, or other hot water systems, add 0.6 - 0.8 gal per 1000 gal of water per day continuously or as needed to maintain control. Addition of BC-118 product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS
NOTE: Add BC-118 separately to the system. Do not mix it with other additives, as to avoid decomposition of BC-118 due to the high pH of many additive formulations. Addition of BC-118 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfate-reducing bacteria, yeasts, and fungi in oil field water, polymer or miscella fluids, water-disposal systems, or other hot water systems, add 0.6 - 0.8 gal per 1000 gal of water per day continuously or as needed to maintain control. Addition of BC-118 product can be made continuously or intermittently. Slug the system as required.