PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE
CAUSES SEVERE BURNS OF EYES
EYE CONTACT MAY CAUSE LOSS OF VISION
IRRITATING TO NOSE AND THROAT
MAY BURN THE SKIN
MAY BE FATAL IF SWALLOWED

Do not get in eyes, on skin, or on clothing. Impact-resistant goggles with side-shields, or face shield, and rubber gloves must be worn when handling. Do not breathe mist or vapor. Use with adequate ventilation.

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 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 CHEMTREC 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

BIOCIDE 7D

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-nitrilopropionamide 98%
INERT INGREDIENTS: 2%
TOTAL: 100%

KEEP OUT OF REACH OF CHILDREN

DANGER

See side panel for additional precautionary statements

EPA Reg. No. 8622-56-12446 **EPA Est. No. 70066-IL-1**

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.

Release for Shipment by:

ZEE COMPANY®
A Member of The Vincit Group
4146 South Creek Road • Chattanooga, TN 37406
(423)-698-1401

NET WEIGHT: 40 LBS.

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 comminution and dusting.

STORAGE AND DISPOSAL

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

STORAGE

Store in a dark, cool, dry, well-ventilated area, 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 DISPOSAL

Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be re-used, dispose of in the same manner. If drum is not contaminated and can be re-used, offer for recycling or reconditioning.

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 dust respirator if dusting occurs. Sweep up dry spills and dispose of as described for pesticide disposal. 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.

DO NOT SHIP WITH FOOD, FEEDS, DRUGS, OR CLOTHING
KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE

DIRECTIONS FOR USE

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

TREATING RECIRCULATING COOLING WATER IN INDUSTRIAL OR COMMERCIAL COOLING SYSTEMS

NOTE: Add BIOCIDE 7D separately to the system. Do not mix it with other additives, so as to avoid decomposition of BIOCIDE 7D due to the high pH of many additive formulations.

Add BIOCIDE 7D 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 sufficient BIOCIDE 7D to reach a concentration in the system of 0.2 – 2.3 ppm active ingredient, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add sufficient BIOCIDE 7D to reach a concentration in the system of 1.2 – 2.3 ppm active ingredient. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.6 – 2.3 ppm BIOCIDE 7D to 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 sufficient BIOCIDE 7D to achieve a concentration in the system of 1.2 – 2.3 ppm.

Subsequent Dose: Maintain a concentration of 0.2 – 1.2 ppm BIOCIDE 7D in the system. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add sufficient BIOCIDE 7D to reach a concentration in the system of 7.0 – 23.0 ppm active ingredient, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add sufficient BIOCIDE 7D to achieve a concentration in the system of 11.6 – 23.0 ppm active ingredient. Maintain until control is achieved.

Subsequent Dose: When microbial control is evident, add sufficient BIOCIDE 7D daily to maintain a concentration in the system of 7.0 – 23.0 ppm active ingredient, 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 sufficient BIOCIDE 7D to reach a concentration in the system of 11.6 – 23.0 ppm active ingredient.

Subsequent Dose: Maintain a continuous feed of 7.0 – 23.0 ppm BIOCIDE 7D in the system. Badly fouled systems must be cleaned before treatment is begun.

TREATING PULP AND PAPER MILL SYSTEMS

NOTE: Add BIOCIDE 7D separately to the system. Do not mix it with other additives, so as to avoid decomposition of BIOCIDE 7D 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 BIOCIDE 7D at levels of 0.03 – 0.10 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 BIOCIDE 7D in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chests, furnish chests, save-alls and white-water tanks. **Heavily fouled systems** must be first boiled out, then treated with 0.03 – 0.07 lb. of BIOCIDE 7D /ton (dry) of paper or pulp as necessary for control. **Moderately fouled systems** should be treated continuously with 0.07 – 0.10 lb. of BIOCIDE 7D /ton (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.03 – 0.07 lb. of BIOCIDE 7D /ton (dry) of paper on a continuous or intermittent basis as needed for control. Dislodged 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 0.03 – 0.07 lb. of BIOCIDE 7D /ton (dry) of paper or pulp, until the slime is controlled, then added on an intermittent basis to maintain control.

TREATING NON-POTABLE REVERSE OSMOSIS SYSTEMS

For controlling bacteria, fungi and algae slimes in non-potable Reverse Osmosis Systems and peripheral equipment, add BIOCIDE 7D to the system inlet water or before any other contamination area ahead of the Reverse Osmosis unit. BIOCIDE 7D 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 BIOCIDE 7D. Add sufficient BIOCIDE 7D to achieve a concentration of 0.2 – 24.0 ppm in the feedwater.

During use of BIOCIDE 7D 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 BIOCIDE 7D. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF BACTERIA

Initial Dose: When the system is noticeably fouled, add sufficient BIOCIDE 7D to achieve a concentration of 1.2 – 2.4 ppm active ingredient in the 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, maintain a concentration of 0.6 – 2.4 ppm of BIOCIDE 7D in the feedwater, 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 12.0 – 24.0 ppm BIOCIDE 7D to the 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, maintain a concentration of 7.2 – 24.0 ppm of BIOCIDE 7D in the feedwater, or as specified by guidelines recommended by the membrane manufacturer.

TREATING METALWORKING FLUIDS CONTAINING WATER

BIOCIDE 7D is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100 to 1:14. 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 60.6 ppm BIOCIDE 7D to the metalworking fluids. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, maintain a concentration of 24.4 – 48.4 ppm BIOCIDE 7D in the system, or as needed to maintain control. Additions of BIOCIDE 7D product can be made continuously or intermittently. Slug the system as required.

TREATING BREWERY PASTEURIZER WATER

For controlling (or inhibiting) the growth of bacteria, fungi or yeasts in brewery pasteurizing water systems, add BIOCIDE 7D at a point in the system to insure uniform mixing.

Initial or Slug Dose: When the system is noticeably fouled, add sufficient BIOCIDE 7D to achieve a concentration of 60.6 ppm active ingredient in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, maintain a concentration of 24.4 – 48.4 ppm BIOCIDE 7D in the system, or as needed to maintain control. Additions of BIOCIDE 7D product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

TREATING ENHANCED OIL RECOVERY SYSTEMS

NOTE: Add BIOCIDE 7D separately to the system. Do not mix it with other additives, so as to avoid decomposition of BIOCIDE 7D due to the high pH of many additive formulations. Addition of BIOCIDE 7D may be made at the free water knockouts, before or after the injection pumps and injection well headers.

For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, add sufficient BIOCIDE 7D to achieve a concentration in feedwater of 0.2 – 16.0 ppm depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD

When the system is noticeably fouled, add 2 - 16 ppm BIOCIDE 7D continuously until the desired degree of control is achieved. Subsequently, treat with 0.2 – 3.9 ppm BIOCIDE 7D continuously or as needed to maintain control.

INTERMITTENT OR SLUG METHOD

When the system is noticeably fouled or to maintain control of the system, add 2.0 - 16.0 ppm BIOCIDE 7D intermittently for 4-8 hours per day and from 1-4 times per week, or as needed depending on the severity of contamination.

NOTE: For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operations, add 3 - 16 ppm BIOCIDE 7D. Additions of BIOCIDE 7D should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to reduce loss of viscosity.

DIRECTIONS FOR TREATING AIR-WASHER SYSTEMS

Add sufficient BIOCIDE 7D to reach a concentration in the system of 0.35 – 22.1 ppm active ingredient, depending on the severity of contamination to control slime-forming bacteria and fungi in industrial air washing systems.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add sufficient BIOCIDE 7D to reach a concentration in the system of 0.7 – 22.1 ppm active ingredient. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add sufficient BIOCIDE 7D every 2 days to reach a concentration in the system of 0.35 – 10.9 ppm active ingredient, 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 sufficient BIOCIDE 7D to achieve a concentration in the system of 0.7 – 22.1 ppm active ingredient.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.35 – 10.9 ppm active ingredient 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

BIOCIDE 7D 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 BIOCIDE 7D to the raw material or product at a concentration of 5 to 408 ppm by weight. This concentration is equivalent to 0.036 to 2.894 lbs. BIOCIDE 7D per 1,000 gallons. The required concentration will depend on the material being treated and the level of contamination present.

DIRECTIONS FOR TREATING PUBLICLY- OWNED TREATMENT WORKS TO CONTROL COLIFORM AND OTHER BACTERIA

Add sufficient BIOCIDE 7D to reach a concentration in the system of 0.2 to 2.0 ppm active ingredient 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 BIOCIDE 7D 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 sufficient BIOCIDE 7D to reach a concentration in the system of 0.1 to 0.3 ppm BIOCIDE 7D active ingredient 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. BIOCIDE 7D should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

DIRECTIONS FOR TREATING OILFIELD AND PETROCHEMICAL SYSTEMS

BIOCIDE 7D may be used either in slug treatment or in continuous application. Dosages may vary from as much as 40 ppm of BIOCIDE 7D in slug application to 2 to 10 ppm of BIOCIDE 7D in continuous treatment (0.061 lbs. BIOCIDE 7D per 1,000 gallons of water equals approximately 7 ppm).

A typical slug treatment is to add 0.25 lbs. of BIOCIDE 7D per 1,000 gallons at intervals as needed to prevent growth of microbial slime. Badly fouled systems may be slug treated to establish control, followed by continuous treatment to maintain control.

DIRECTIONS FOR TREATING FRACTURING FLUIDS

BIOCIDE 7D reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. BIOCIDE 7D may be added during pre-mixing of the fracturing fluid or (in the case of direct mix/injection systems) an aqueous solution may be added by direct injection at the head during the fracturing procedure.

FREQUENCY AND DOSE:

BIOCIDE 7D should be used for each fracturing operation to ensure best results. BIOCIDE 7D should be added at a rate of 2.0 to 3.0 lbs. per 10,000 gallons (approximately 24 to 36 ppm) depending on the quality of the makeup water.