

2023-1679  
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# AQUCAR™ DB 20 Water Treatment Microbiocide

INDUSTRIAL  
SOLUTION

DANGER



CORROSIVE



POISON

DANGER CORROSIVE TO EYES AND SKIN

POTENTIAL SKIN SENSITIZER

READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: 2,2-dibromo-3-nitrilopropionamide...20%

REGISTRATION No. 23358  
PEST CONTROL PRODUCTS ACT

LANXESS Corporation  
111 RIDC Park West Drive  
Pittsburgh, PA 15275-1112  
1-800-LANXESS

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NET CONTENTS: Tote 960 Litres or Drum 181.6 Litres or Pail 18.4 Litres or Bottle 1.8 Litres

**EMERGENCY TELEPHONE NUMBERS**  
**TRANSPORTATION EMERGENCIES ONLY:**

CANUTEC (Canada): 1-613-996-6666

CHEMTREC: 1-800-424-9300 (USA); 1-703-527-3887 (International)

**ALL OTHER EMERGENCIES:**

LANXESS: 1-800-410-3063 (USA); 1-866-673-6350 (Canada)

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

**CORROSIVE TO EYES AND SKIN. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. FATAL OR POISONOUS IF SWALLOWED. MAY BE FATAL IF INHALED. DO NOT INHALE/BREATHE SPRAY. POTENTIAL SKIN SENSITIZER.**

Do not get in eyes, on skin, or on clothing • Wear long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks during mixing, loading, application, clean up and repair • Additionally, wear goggles or face shield during mixing and loading • Wash thoroughly after handling • Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet • Users should remove clothing immediately if pesticide comes in contact with skin through soaked clothing or spills • Then wash skin thoroughly and put on clean clothing • Wash contaminated clothing separate from other laundry prior to reuse • Users should remove protective clothing immediately after handling this product • Wash the outside of gloves before removing • As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

Toxic to aquatic organisms. It is not to be used in circumstances that would cause or allow it to enter lakes, streams, ponds, estuaries, oceans or other waters in contravention of federal or provincial regulatory requirements. The requirements of applicable laws should be determined before using the product. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority.

### **FIRST AID**

#### **If in Eyes**

Hold eye open and rinse slowly and gently with water for 30 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

#### **If Inhaled**

**Move person to fresh air. If person not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre 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 centre or doctor for treatment advice.

#### **If Swallowed**

Call a poison control centre 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 a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

## **DIRECTIONS FOR USE**

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

NOTE: Add AQUCAR DB 20 Water Treatment Microbiocide separately to the system. Do not mix with other additives in order to avoid decomposition of the product due to the high pH of many additive formulations.

## **PAPER MILLS**

For the control of bacterial, fungal and yeast growth in pulp, paper and paper-board mills, add AQUCAR DB 20 Water Treatment Microbiocide at the rate of 60-210 mL/tonne of pulp or paper (dry basis). Addition may be continuous or intermittent, depending upon the type of system and the severity of contamination. It should be made with a metering pump at a location that will insure uniform distribution of the product in the mass of fiber and water such as the beaters, Jordan inlet or discharge, broke chest, furnish chests, save-alls and white-water tanks.

Heavily fouled systems should be boiled out, then treated with 60-140 mL AQUCAR DB 20 Water Treatment Microbiocide /tonne of paper (dry basis), as necessary for control.

Moderately fouled systems should be treated continuously with 140-210 mL AQUCAR DB 20 Water Treatment Microbiocide /tonne of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 60-140 mL Microbiocide /tonne of paper on a continuous or intermittent basis, as needed for control. Dislodged slime may cause breaks in the paper and a cleanup of the paper machine may be advisable.

Slightly fouled systems should be treated continuously with 60-140 mL AQUCAR DB 20 Water Treatment Microbiocide /tonne of paper (dry basis) until the slime is controlled, then added on an intermittent basis to maintain control.

## **INDUSTRIAL RECIRCULATING WATER COOLING TOWERS**

This product is for recirculating water systems only

Add AQUCAR DB 20 Water Treatment Microbiocide to the basin (or any other point of uniform mixing). Addition should be made with a metering pump. It may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time in the system.

Optimum performance with this product is attained by continuous or intermittent treatment. If “shock” treatment is used, the blowdown should be discontinued for 24-48 hours.

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#### FOR CONTROL OF BACTERIA

Add 1.0-10 mL AQUICAR DB 20 Water Treatment Microbiocide /1000 L of water in the system, depending on the severity of contamination.

Intermittent or Slug Method – Initial Dose: When the system is noticeably fouled, add 5.0-10 mL AQUICAR DB 20 Water Treatment Microbiocide /1000 L of water in the system. Repeat until control is achieved.

Subsequent dose: When microbial control is evident, add 3.0-10 mL AQUICAR DB 20 Water Treatment Microbiocide/1000 L 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 5.0-10 mL AQUICAR DB 20 Water Treatment Microbiocide /1000 L water to the system. Subsequently maintain this level by pumping a continuous feed of 0.5-5.0 mL of product /1000 L of water in the system per day. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF ALGAE Add 30-95 mL AQUICAR DB 20 Water Treatment Microbiocide /1000 L of water in the system, depending on the severity of contamination.

Intermittent or Slug Method – Initial Dose: When the system is noticeably fouled, add 50-95 mL AQUICAR DB 20 Water Treatment Microbiocide/1000 L of water in the system. Repeat until control is achieved.

Subsequent Dose: When algal control is evident, add 30-95 mL AQUICAR DB 20 Water Treatment Microbiocide/1000 L of water in the system daily, or as needed to maintain control. Fouled systems must be cleaned before treatment is begun.

Continuous Feed Method – Initial Dose: When the system is noticeably fouled, add 50-95 mL AQUICAR DB 20 Water Treatment Microbiocide /1000 L of water to the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 30-95 mL AQUICAR DB 20 Water Treatment Microbiocide/1000 L of water in the system per day. Badly fouled systems must be cleaned before treatment is begun.

#### **MEMBRANE SYSTEMS FOR INDUSTRIAL WATER**

AQUICAR DB 20 Water Treatment Microbiocide may be used to control bacteria and reduce biofouling in various membrane system types (reverse osmosis, ultrafiltration, nanofiltration, and microfiltration) used for industrial water processing. Acceptable applications include reverse osmosis for the production of boiler make-up water, electronic component rinsing, and industrial wastewater treatment.

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**NOTE: Reverse Osmosis (RO) concentrate streams must not be allowed to enter lakes, streams, ponds, estuaries, oceans or other waters in contravention of federal or provincial regulatory requirements. The requirements of applicable laws should be determined before using the product. Discharge of RO concentrate streams to sewer systems may require approval of the local sewer treatment plant authority.**

AQUCAR DB 20 Water Treatment Microbiocide may be added to the RO feed water at a rate of 1 to 100 ppm based on the feed water flow rate (0.8 to 80 ml/min per cubic metre/min of feed water (0.1 to 10 fl. oz./min per 1000 gallons/min)). Apply product to the service cycle feed water on a regular basis using an addition cycle of at least 30 minutes. The frequency of addition may be daily or as necessary in order to maintain RO productivity performance. For highly fouled systems, a 100 ppm dosage should be applied each day for several hours until the system performance has recovered.

**NOTE: Do not add AQUCAR DB 20 Water Treatment Microbiocide in the presence of sodium bisulfite or other reducing agents which are being added to the feed water of the membrane system. In some situations the addition of any reducing agents must be suspended at least 15 minutes prior to the addition of AQUCAR DB 20 Water Treatment Microbiocide in order to avoid neutralization and deactivation of the active ingredient.**

AQUCAR DB 20 Water Treatment Microbiocide may be added to the feed tank used for an off-line chemical cleaning procedure. Addition should be at a rate of 20 to 200 ppm based on the total amount of solution in the feed tank (16 to 160 mL. per cubic metre ( 2 to 20 fl. oz. per 1000 gallons)). Following the complete transfer of feed solution, re-circulate or soak for 1 to 3 hours to ensure sufficient contact for all RO membrane modules with the DBNPA solution. Frequency of addition should be every 5 days or as needed. NOTE: Add AQUCAR DB 20 Water Treatment Microbiocide separately to the feed tank system. Do not mix with other chemical additives as this may result in rapid decomposition of AQUCAR DB 20 Water Treatment Microbiocide due to the high pH of many additive formulas. It is important to thoroughly rinse the feed tank system so it is free of any high pH chemicals prior to introducing the AQUCAR DB 20 Water Treatment Microbiocide product.

## **METALWORKING FLUIDS CONTAINING WATER**

This product is effective in metalworking concentrates which have been diluted in water at ratios of 1:100 to 1:4.

For controlling (or inhibiting) growth of bacteria, fungi and yeast that may deteriorate metalworking fluids containing water, add AQUCAR DB 20 Water Treatment Microbiocide to the fluid in the collection tank. Additions should be made with a metering pump.

Initial or Slug Dose: When the system is just noticeably fouled, add 250 mL AQUCAR DB 20 Water Treatment Microbiocide/1000 L of metalworking fluid to the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 100-200 mL of AQUCAR DB 20 Water Treatment Microbiocide/1000 L of metalworking fluid per day or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

## **OIL FIELD APPLICATIONS**

For reduction of bacterial contamination and degradation in oil recovery operations, add product to the system at a rate of 24 mL to 216 mL per 1000 L water (30 to 270 ppm product ) depending on the severity of contamination. Add at a point of uniform mixing, at the concentration within the stated dosing range for the relevant product application. Subsequent treatments can be applied, as needed, to maintain an effective microbial control concentration, within the described dosage range. The stated concentration ranges provide microbial control of microorganisms at differing levels of contamination.

**FRACTURING FLUIDS** 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. Dose: The product must be added at a rate of 72 mL to 216 mL per 1000 L water (90 to 270 ppm product) depending on water quality.

Retreat after 48 hours if the frac job is delayed.

## **ENHANCED OIL RECOVERY (EOR) FLUIDS**

The product reduces bacterial contamination and degradation of EOR polymers and gels. The product must be added to injection water before polymer addition.

Dose: The product must be added at a rate of 24 mL to 216 mL per 1000 L water (30 to 270 ppm product). Product must be added at a point to ensure proper mixing.

## **WATER FLOOD**

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.

Dose: The product must be added at a rate of 24 mL to 216 mL per 1000 L water (30 to 270 ppm product). Product must be added at a point to ensure uniform mixing.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.

## **STORAGE**

To maintain product quality, store at temperatures below 35C. Keep package tightly closed when not in use. Do not contaminate water, food or feed by storage or disposal.

## **DISPOSAL**

1. Triple- or pressure rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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