

KR-153SL  
SOLUTION

A MICROBIOCIDAL BACTERICIDE, FUNGICIDE, ALGICIDE AND SLIMICIDE,  
IN TREATING RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING  
SYSTEMS AND FOR PAPER MILLS, NON-MARINE USES IN ENHANCED OIL  
RECOVERY SYSTEMS, AND METAL-WORKING CUTTING FLUIDS  
CONTAINING WATER

GUARANTEE:  
2,2-Dibromo-3-nitrilopropionamide 20%

COMMERCIAL

REGISTRATION NO. 30396  
PEST CONTROL PRODUCTS ACT

DANGER

POISON CORROSIVE

DANGER - CORROSIVE TO EYES AND SKIN  
POTENTIAL SKIN SENSITIZER  
READ THE LABEL BEFORE USING  
KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 600 Litres

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USA  
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PRECAUTIONS  
KEEP OUT OF REACH OF CHILDREN  
HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE TO EYES AND SKIN  
POTENTIAL SKIN SENSITIZER

May be harmful or fatal if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Do not inhale vapours or spray mist. Wear a long-sleeve shirt, long pants, shoes plus socks, full face protection and chemical-resistant gloves when handling. Wear a respirator if the area is not well ventilated and during cleaning, maintenance and repair activities. Users should wash hands and face 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

This product is toxic to fish and other 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.

NOTE: Do not discharge treated water into estuaries, lakes, streams, ponds, or public waters.

#### CHEMICAL AND PHYSICAL HAZARDS

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

#### FIRST AID:

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.

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 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 centre or doctor for further treatment advice.

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 centre or doctor for treatment advice.

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

**TOXICOLOGICAL INFORMATION:** Dilution of an ingested corrosive is a safer first aid treatment than emesis. Treat symptomatically.

**STORAGE:** To maintain product quality store in a dark, cool, dry, well-ventilated area, not above 30°C, rotate and use stock within three months. Store in well-closed original containers, away from energy sources, combustible organic materials and oxidizers. 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 treatment site.
2. Follow provincial instruction 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.

**For SPILLS:** When handling or dealing with spills, use impact-resistant goggles with side shields, or face shield; wear body-covering clothes, including impervious chemical resistant gloves and boots; use a dust respirator if misting occurs. For small spills, recover free product. 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 FLUSH INTO SURFACE STREAMS. INFORM THE PROVINCIAL REGULATORY AUTHORITY OR THE REGISTRANT.**

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offense under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

1.20 KG KR-153SL LIQUID per L

**DO NOT SHIP WITH FOOD, FEEDS, DRUGS OR CLOTHING**

**DIRECTIONS FOR USE**

**DIRECTIONS FOR TREATING INDUSTRIAL RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING**

This product is for recirculating water systems only.

**NOTE:** Add KR-153SL separately to the system. Do not mix it with other additive, so as to avoid decomposition of KR-153SL due to the high pH of many additive

formulations. Add KR-153SL 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 0.00095-0.0095L of KR-153SL/1000L of water in the system depending on the severity of contamination.

#### INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add 0.0048- 0.0095L KR-153SL/1000L of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.0024-0.0095L KR-153SL/1000L 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 0.0048- 0.0095L of KR-153SL /1,000 L of water to the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.00095-0.0048L of KR-153SL/1,000 L 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 0.029-0.095 L of KR-153SL/1,000 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 0.048- 0.095L of KR-153SL/1000L of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.029- 0.095L KR-153SL/1,000 L of water to 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 L of KR-153SL/1,000 L of water in the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.029-0.095L of KR-153SL/1,000 L 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: This product is not to be used in the production of paper, paperboard or any food packaging materials that comes in contact with food.

NOTE: Add KR-153SL separately to the system. Do not mix it with other

additives, so as to avoid decomposition of KR-153SL 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 KR-153SL at levels of 0.075-0.210 KG/tonne (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 KR-153SL in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chests, furnish chests, savealls and white-water tanks. Heavily fouled systems must first be boiled out, then treated with 0.075- 0.175 KG of KR-153SL/tonne (dry) of paper or pulp as necessary for control. Moderately fouled systems should be treated continuously with 0.175-0.210 KG of KR-153SL/tonne (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.075-0.175 KG of KR-153SL tonne (dry) of paper on 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 0.075-0.175 KG of KR-153SL/tonne (dry) of paper or pulp, until the slime is controlled, then added on an intermittent basis to maintain control.

#### DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS (NON-MARINE USES)

NOTE: Add KR-153SL separately to the system. Do not mix with other additives, so as to avoid decomposition of KR-153SL due to the high pH of many additive formulations. Addition of KR-153SL 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 1-80 ppm KR-153SL (0.38-24.23 L of KR-153SL per 2400 barrels of water) 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 10-80 ppm KR-153SL (3.03-24.23 L of KR-153SL per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm KR-153SL (0.38-4.54 of KR-153SL per 2400 barrels of water) 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 10-80 ppm KR-153SL (3.03-24.23 L of KR-153SL per 2400 barrels of water)

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 15-80 ppm KR-153SL (4.54-24.23 L of KR-153SL per 2400 barrels of water). Additions of KR-153SL should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

#### DIRECTIONS FOR TREATING METAL - WORKING CUTTING FLUIDS CONTAINING WATER

KR-153SL is effective in metal working 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 metal working 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 KR-153SL at the rate of 0.25 L (318 g) per 1000 L of metal working fluid in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add KR-153SL at the rate of 0.1 to 0.2 litres (127 to 254 grams) per 1000 litres of metal working fluid per day, or as needed to maintain control. Additions of KR-153SL can be made continuously or intermittently. Slug the system as required.

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