

K-BROM 40

ACTIVE INGREDIENT:

SODIUM BROMIDE _____ 38%

A BACTERICIDE, SLIMICIDE, AND ALGAECIDE FOR TREATING RECIRCULATING
COOLING WATER SYSTEMS AND PULP AND PAPER MILLS

REGISTRATION NUMBER 31031 PEST CONTROL PRODUCTS ACT

CAUTION POISON

COMMERCIAL
KEEP OUT OF REACH OF CHILDREN
READ LABEL BEFORE USING

WATER SCIENCE TECHNOLOGIES, LLC
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Birmingham, AL
35234, USA
866-284-9244

NET CONTENTS: _____

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

PRECAUTIONS:**HARMFUL IF SWALLOWED. AVOID CONTACT WITH EYES.****USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING****CHEMICAL AND PHYSICAL HAZARDS:**

Avoid contact oxidizers (other than sodium hypochlorite and chlorine), acids, alkaloidal and heavy metal salts.

STORAGE AND DISPOSAL:

Do not contaminate water, food or feed by storage or disposal. Store in cool, dry, well ventilated area, in well closed original containers, away from energy sources, acids, alkaline and heavy metal salts. Pesticide wastes are acutely hazardous.

DISPOSAL: 1. Triple- or pressure-rinse the empty container. Add the rinsings to the treatment site. 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 the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial authority in case of a spill, and for clean-up of spills.

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.

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.

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 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.

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.

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

Toxicological Information: Treat symptomatically.

DIRECTIONS FOR USE:

K-BROM 40 is to be used in conjunction with an oxidant such as sodium hypochlorite (12.5%) or chlorine gas (99.9%) to produce the hypobromous acid.

Wear protective eyewear, chemical-resistant coveralls over long-sleeved shirt, long pants, and chemical-resistant gloves and footwear when handling the concentrate and contacting treated process fluids. For use with closed loading and transfer systems only.

Toxic to aquatic organisms. DO NOT discharge effluent containing this product or the biocide produced into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters unless the effluent has been detoxified by suitable means.

K-BROM 40 may be added at the system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. Consult your feeder manufacturer for correct procedure and proper use of the feeder equipment.

NOTE: This product is not to be used in the production of paper or paperboard that comes in contact with food.

INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS:

Used effectively at dosages recommended to achieve exposures to 0.5-1.0 part per million (ppm) of “active” residual bromine, or as needed to maintain control of algal, bacterial and fungal slimes in commercial and industrial cooling towers; heat exchange water towers, industrial water scrubbing systems, and influent systems such as flow through filters, lagoons, etc.

DOSAGE RATES:

Initial Dose: When noticeably fouled, add sufficient K-BROM 40 and chlorine or sodium hypochlorite to achieve the “active” bromine level (0.5-5.0 ppm). A 0.125 to 2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 0.192-3.175 KG of chlorine gas (99.9%) or 1.3-21 litres NaOCl (12.5%) for each litre of K-BROM 40.

Subsequent Dose: When microbial control is evident, add sufficient K-BROM 40 and chlorine or sodium hypochlorite to achieve the “active” residual bromine level (0.5-5.0

ppm), measured 5 minutes after treatment. Continue as in initial dose.

PULP AND PAPER MILLS:

Used for the control of algal, bacterial and fungal slimes, in pulp and paper mill fresh and sea water influent systems, cooling water systems, wastewater treatment systems, nonpotable water systems and other process water. Apply K-BROM 40 with sodium hypochlorite or chlorine as directed.

DOSAGE RATES:

Initial Dose: When noticeably fouled, add sufficient K-BROM 40 and chlorine or sodium hypochlorite to achieve the “active” residual bromine level (0.5-5.0 ppm), measured about 5 minutes after treatment. A 0.125 to 2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 0.192-3.175 KG of chlorine gas (99.9%) or 1.3-21 litres NaOCl (12.5%) for each litre of K-BROM 40.

Subsequent Dose: When microbial control is evident, add sufficient K-BROM 40 and chlorine or sodium hypochlorite to maintain the “active” residual bromine level (0.5-5.0 ppm), measure about 5 minutes after treatment. Continue as in initial dose.