

88714-3



11/12/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 12, 2014

Robert Rosenwasser
Agent
Water Science Technologies LLC
5520 Parkview Circle
Bessemer, AL 35022

Subject: Label Notification per PRN 98-10 – Label Changes Consistent with the Primary Supplier’s Newest EPA Stamp Accepted Label.
Product Name: K-BROM 40
EPA Registration Number: 88714-3
Application Date: October 8, 2014
Decision Number: October 9, 2014

Dear Mr. Rosenwasser

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

If you have any questions, you may contact Lorena Rivas at 703-305-5027 or via email at rivas.lorena@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie Chao".

for

Julie Chao, Acting Product Manager 34
Regulatory Management Branch II
Antimicrobials Division (7510P)
Office of Pesticide Programs



K-BROM[®] 40

A DISINFECTANT, SANITIZER, BACTERICIDE, SLIMICIDE, ALGAEICIDE, AND MOLLUSK CONTROL AGENT FOR TREATING RECIRCULATING COOLING WATER SYSTEMS AND ONCE-THROUGH COOLING WATER SYSTEMS. PULP AND PAPER MILLS, WASTEWATER TREATMENT SYSTEMS, AIR WASHERS, AND BREWERY PASTEURIZERS.

ACTIVE INGREDIENT:

Sodium Bromide

40%

OTHER INGREDIENTS:

60%

TOTAL:

100%

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

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.

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 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

See side panels for additional precautionary statements.

MANUFACTURED FOR:

WATER SCIENCE TECHNOLOGIES, LLC
5520 PARKWOOD CIRCLE
BESSEMER, AL 35022
866-284-9244

NOTIFICATION
Date Received: _____
Reviewed By: *[Signature]*

EPA Reg. No. 88714-3

LOT#:

NET CONTENTS: _____

Transportation Emergency (Spill) Tel: 800-255-3924 CHEMTEL

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

HARMFUL IF SWALLOWED. HARMFUL IF ABSORBED THROUGH THE SKIN. AVOID CONTACT WITH EYES, SKIN OR CLOTHING.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

GENERAL PRECAUTIONS AND RESTRICTIONS: Do not smoke, drink, or eat when handling. Do not ship with foods, feeds, drugs, or clothing. Keep container tightly closed when not in use.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. 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.

PHYSICAL OR CHEMICAL HAZARDS: Avoid contact with strong oxidizers (except when in use), acids, alkaline, and heavy metal salts.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, well-ventilated area, in well-closed original containers.

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 in accordance with label instructions, contact your Regional Office of the EPA for guidance.

CONTAINER HANDLING: Non-refillable containers: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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 rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Refillable containers:** Refill this container with sodium bromide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

SPILLS: When handling or dealing with spills, use goggles with side shields or face shield, and protective clothing, including chemical-resistant gloves and boots. Absorb on sand or vermiculite and place in closed container and dispose of as described for pesticide disposal. If containers are contaminated or decomposing, do not reuse. Isolate unsealed container in the open or a well-ventilated area; flood with large volumes of water if necessary.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read the entire label and use strictly in accordance with precautionary statements and directions.

This product is to be used in conjunction with an oxidant such as sodium hypochlorite (12.5%), chlorine gas (99.9%), trichloro-s-triazine (99.0%), sodium dichloro-s-triazine (99.0%), or sodium dichloro-s-triazine dithydrate (99.0%) to produce hypobromous acid. This product may be added at the system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. This product can be added whenever chlorination is applied, for all uses. Consult your feeder manufacturer for correct procedure and proper use of feeder equipment.

INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS

Use effectively at dosages to achieve exposures to 0.5-5.0 parts per million (ppm) of active residual bromine, or as needed to maintain control of algal, bacterial and fungal slimes and controls the settlement and growth of mollusks such as the Zebra mussel (Dreissena) or the Asiatic clam (Corbicula) 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 amount of this product and oxidant to achieve the active residual bromine level (0.5-5.0 ppm), measured about 5 minutes after treatment. A 0.5-2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio

is achieved by using 1.5-6.0 pounds of pounds of trichloro-s-triazine (99.0%) 2.7-10.7 pounds of sodium dichloro-s-triazine (99.0%).

Subsequent Dose: When microbial to maintain the active residual bromine level Continue as in initial dose.

ONCE-THROUGH INDUSTRIAL COOLING Used for the control of algal, bacterial, mollusks such as the Zebra mussel (Dreissena) or the Asiatic clam (Corbicula) in closed-cycle fresh and seawater cooling systems or before any other contaminated area in Same as for Industrial Recirculating Cooling

PULP AND PAPER MILLS

Used for the control of algal, bacterial, influent systems, cooling water systems, other process water. Apply this product (SUBSEQUENT): Same as for Industrial F

WASTEWATER

This product, when used as directed, will required is determined by the degree of the wastewater system. If its construction the point in the system where a secondary an oxidant must be added in quantity measured about 5 minutes after treatment recommended mole ratio may be achieved. 1.5-6.0 pounds of trichloro-s-triazine (99.0%), 0.3-6.7 pounds of sodium dichloro-s-triazine (99.0%), or 0.4-1.0 pounds of sodium dichloro-s-triazine dithydrate (99.0%) for each gallon of this product. The total number of coliform bacteria in the procedure) has been reduced to a level per

AIR WASHERS AND BREWERY PASTE

When used in conjunction with an oxidant lime and controls the settlement and gr Asiatic clam (Corbicula) in influent water lagoons; heat exchange water systems; scrubbing systems.

DOSAGE RATES: Add this product to the For example: 1) 1.6-26.5 pounds of chl 1.3-21.2 gallons sodium hypochlorite (1 solution. Initial Dose: When the system per 1000 gals of water contained in the chlorine per 1000 gallons of contained 12.5% sodium hypochlorite solution per microbial control is evident, add 0.0002-0 in the system and oxidize with either gas contained water), or sodium hypochlorite solution per 1000 gallons of water.

FRUIT AND VEGETABLE WASH

When used in conjunction with an oxidant and transport of fruits and vegetables. The dosage of 59ppm of product (39.5 gallon sufficient amount of this product and chl 0.5-5 ppm when measured approximately) this product and oxidant is a one to one (3.3 gallons) or 15% NaOCl dose (2.0 bromide solution). This product may be a NaOCl solution for activation. The use of water rinse to remove, to the extent possible

WARRANTY: Seller warrants that this product for the purposes stated on the label. Conditions of use, but to the extent of warranty of MERCHANTABILITY OR FIT extends to the use of this product under conditions not reasonably foreseeable to.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

HARMFUL IF SWALLOWED. HARMFUL IF ABSORBED THROUGH THE SKIN. AVOID CONTACT WITH EYES, SKIN OR CLOTHING.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

GENERAL PRECAUTIONS AND RESTRICTIONS: Do not smoke, drink, or eat when handling. Do not ship with foods, feeds, drugs, or clothing. Keep container tightly closed when not in use.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. 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.

PHYSICAL OR CHEMICAL HAZARDS: Avoid contact with strong oxidizers (except when in use), acids, alkaline, and heavy metal salts.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, well-ventilated area, in well-closed original containers.
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 in accordance with label instructions, contact your Regional Office of the EPA for guidance.

CONTAINER HANDLING: Non-refillable containers: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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 rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Refillable containers:** Refill this container with sodium bromide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

SPILLS: When handling or dealing with spills, use goggles with side shields or face shield; and protective clothing, including chemical-resistant gloves and boots. Absorb on sand or vermiculite and place in closed container and dispose of as described for pesticide disposal. If containers are contaminated or decomposing, do not reuse. Isolate unsealed container in the open or a well-ventilated area; flood with large volumes of water if necessary.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read the entire label and use strictly in accordance with precautionary statements and directions.

This product is to be used in conjunction with an oxidant such as sodium hypochlorite (12.5%), chlorine gas (99.9%), trichloro-s-triazinetrione (99.0%), sodium dichloro-s-triazinetrione (99.0%), or sodium dichloro-s-triazinetrione dihydrate (99.0%) to produce hypobromous acid. This product may be added at the system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. This product can be added whenever chlorination is applied, for all uses. Consult your reseller manufacturer for correct procedure and proper use of feeder equipment.

INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS

Use effectively at dosages to achieve exposures to 0.5-5.0 parts per million (ppm) of active residual bromine, or as needed to maintain control of algal, bacterial and fungal slimes and controls the settlement and growth of mollusks such as the Zebra mussel (Dreissena) or the Asiatic clam (Corbicula) 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 amount of this product and oxidant to achieve the active residual bromine level (0.5-5.0 ppm), measured about 5 minutes after treatment. A 0.5-2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio

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:40

IE, ALGAEICIDE, AND MOLLUSK
KILLING WATER SYSTEMS AND
PAPER MILLS, WASTEWATER
PASTEURIZERS.

40%
60%
100%

CHILDREN

Immediately for treatment advice.
Do not induce vomiting unless told to
give anything by mouth to an

ing. Rinse skin immediately with
water. Call center or doctor for treatment
if necessary.

ly with water for 15-20 minutes.
s, then continue rinsing eye. Call
center or doctor for treatment.

; not breathing, call 911 or an
outh-to-mouth, if possible. Call a
poison control center or doctor.

Use of gastric lavage.

ary statements.

S, LLC

NOTIFICATION
Date Received: 1/18/14
Reviewed By: [Signature]
EPA Est. No. 67701-AL-01

NTS:

-255-3924 CHEMTEL

is achieved by using 1.5-6.0 pounds of chlorine gas (99.9%), 1.3-5.2 gallons NaOCl (12.5%), 1.7-6.7 pounds of trichloro-s-triazinetrione (99.0%), 2.4-9.5 pounds of sodium dichloro-s-triazinetrione (99.0%), or 2.7-10.7 pounds of sodium dichloro-s-triazinetrione dihydrate (99.0%) for each gallon of this product. **Subsequent Dose:** When microbial control is evident, add sufficient of this product and oxidant to maintain the active residual bromine level (0.5-5.0 ppm), measured about 5 minutes after treatment. Continue as in initial dose.

ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS

Used for the control of algal, bacterial, and fungal slimes and controls the settlement and growth of mollusks such as the Zebra mussel (Dreissena) or the Asiatic clam (Corbicula) in once-through and closed-cycle fresh and seawater cooling systems. Apply this product and oxidant to the system inlet water or before any other contaminated area in the system. **DOSAGE RATES (INITIAL AND SUBSEQUENT):** Same as for Industrial Recirculating Cooling Water Systems.

PULP AND PAPER MILLS

Used for the control of algal, bacterial, and fungal slimes, in pulp and paper mill fresh and seawater influent systems, cooling water systems, wastewater treatment systems, nonpotable water systems and other process water. Apply this product with oxidant as directed. **DOSAGE RATES (INITIAL AND SUBSEQUENT):** Same as for Industrial Recirculating Cooling Water Systems.

WASTEWATER

This product, when used as directed, will disinfect wastewater effectively. The amount of sodium bromide required is determined by the degree of fouling. This product can be added to one or several locations of the wastewater system. If its construction permits, it is often added at the influent of the final clarifier or at the point in the system where a secondary treatment is given, prior to effluent discharge. This product and an oxidant must be added in quantities sufficient to reach residual bromine levels of 0.3-1.0 ppm measured about 5 minutes after treatment. A 0.08-2.0 mole ratio is recommended. Typically, the recommended mole ratio may be achieved by using 0.2-6.0 pounds of chlorine gas (99.9%), 0.2-5.2 gallons of NaOCl (12.5%), 0.3-6.7 pounds of trichloro-s-triazinetrione (99.0%), 0.4-9.5 pounds of sodium dichloro-s-triazinetrione (99.0%), or 0.4-10.7 pounds of sodium dichloro-s-triazinetrione dihydrate (99.0%) for each gallon of this product. The treatment with this product can be evaluated by determining whether the total number of coliform bacteria and/or fecal coliform bacteria (using the Most Probable Number procedure) has been reduced to a level permitted by governing regulations.

AIR WASHERS AND BREWERY PASTEURIZERS

When used in conjunction with an oxidant, this product effectively controls algal, bacterial, and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (Dreissena) or the Asiatic clam (Corbicula) in influent water systems such as flow through filters, cooling ponds, canals, and lagoons; heat exchange water systems; air washers; pasteurizers; retort systems; and industrial water scrubbing systems.

DOSAGE RATES: Add this product to the system at 0.125-2.0 sodium bromide/oxidant mole ratio.
For example: 1) 1.6-28.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or, 2) 1.3-21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon sodium bromide solution. **Initial Dose:** When the system is noticeably fouled, add 0.0003-0.024 gallons of this product per 1000 gals of water contained in the system and oxidize with either gas chlorine (0.008-0.040 lbs gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.007-0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water). **Subsequent Dose:** When microbial control is evident, add 0.0002-0.024 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.004-0.040 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.003 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of water).

FRUIT AND VEGETABLE WASH

When used in conjunction with an oxidant (Chlorine gas or NaOCl), this product can be used for the wash and transport of fruits and vegetables. This product and oxidant must be added at a rate not to exceed a dosage of 55ppm of product (39.5 gallons of this product per one million gallons of water treated). Apply sufficient amount of this product and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5-5 ppm when measured approximately 5 minutes after treatment. The recommended activation mix of this product and oxidant is one to one molar ratio. Chlorine dose (99%) 3.3 pounds, 10% NaOCl dose (3.3 gallons) or 15% NaOCl dose (2.0 gallons) will activate one gallon of this product (40% sodium bromide solution). This product may be continuously metered to Chlorinator eductor water or mixed with a NaOCl solution for activation. The use of this product under this application must be followed by a potable water rinse to remove, to the extent possible, residues of the chemical.

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 to the extent consistent with applicable law, neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, expressed 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.

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