

88714-1

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U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Antimicrobials Division (7510 P)
 1200 Pennsylvania Avenue N W
 Washington D C 20460

EPA Reg Number	Date of Issuance
88714 1	July 31 2012
Term of Issuance	
Unconditional	
Name of Pesticide Product	
K-Bac 1005	

NOTICE OF PESTICIDE
 Registration
 Reregistration

(under FIFRA as amended)

Name and Address of Registrant (include ZIP Code)
 Water Science Technologies
 5520 Parkwood Circle
 Bessemer AL 35022

Note Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce In any correspondence on this product always refer to the above EPA registration number

On the basis of information furnished by the registrant the above named pesticide is hereby registered/reregistered under the Federal Insecticide Fungicide and Rodenticide Act
 Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency In order to protect health and the environment the Administrator on his motion may at any time suspend or cancel the registration of a pesticide in accordance with the Act The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others

This product (OPP Decision No 466143) is unconditionally registered in accordance with FIFRA sec 3(c)(7)(A) provided that you

- 1 Submit and/or cite all data required for registration of your product under FIFRA sec 3(c)(5) when the Agency requires all registrants of similar products to submit such data and submit acceptable responses required for re registration of your product under FIFRA section 4
 - 2 Change EPA File Symbol 88714 R to EPA Registration Number 88714 1
 - 3 You must submit acceptable product specific Corrosion Characteristics and Storage Stability data within a year of this Registration notice
- Submit one copy of the finished final printed label prior to releasing this product for sale
- If these conditions are not complied with the registration will be subject to cancellation in accordance with FIFRA sec 6(e)
- Your release for shipment of the product constitutes acceptance of these conditions
- A stamped copy of the unconditionally approved label is enclosed for your records

Signature of Approving Official

 Monisha Harris
 Product Manager 32
 Regulatory Management Branch II
 Antimicrobials Division (7510 P)

Date
 July 31 2012

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{All text in brackets [xxx] is optional and may or may not be intended on a final label }
 {All text in braces {xxx} is administrative and will not appear on a final label }

K-BAC[®] 1005

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-nitropropionamide	5.49%
OTHER INGREDIENTS	94.51%
TOTAL	100.00%

2.5 pounds K BAC 1005 liquid per gallon

KEEP OUT OF REACH OF CHILDREN
DANGER

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 preferable 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 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.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
YOU MAY ALSO CONTACT [1 304 746 3000] [1 800-420 9236] FOR EMERGENCY MEDICAL TREATMENT INFORMATION	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

See [back] [side] panels for additional precautionary statements and [first aid]

PRECAUTIONARY STATEMENTS
 HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive Causes irreversible eye damage Eye contact may cause loss of vision Harmful if swallowed inhaled or absorbed through the skin Wash thoroughly after handling Do not smoke drink or eat when handling Keep container tightly closed when not in use Do not ship with food feeds drugs or clothing To maintain product quality store in the dark at temperatures below 104 F (40 C)

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Avoid breathing vapors or spray mist Do not get in eyes or on clothing Avoid contact with skin In case of contact immediately rinse skin with plenty of water Get medical attention if irritation persists Wear protective eyewear (goggles face shield or safety glasses) Use with adequate ventilation Wash thoroughly with soap and water after handling and before eating drinking chewing gum using tobacco or using the toilet Remove contaminated clothing and wash before re use

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This product may cause skin sensitization reactions in some people

PERSONAL PROTECTION EQUIPMENT (PPE)

- Applicators and other handlers must wear
 - Coveralls worn over long sleeved shirt and long pants
 - Chemical resistant footwear plus socks
 - Goggles or face shield
 - Chemical resistant gloves (such as barrier laminate butyl rubber neoprene rubber nitrile rubber polyvinyl chloride (PVC and viton)

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FOR CLEANING EQUIPMENT

- Chemical resistant apron

Follow manufacturer s instructions for cleaning/maintaining PPE If no such instructions exist for washables use detergent and hot water Keep and wash PPE separately from other laundry

User Safety Recommendations

Users must wash hands before drinking chewing gum using tobacco or using the toilet
 Users must remove clothing immediately if pesticide gets inside Then wash thoroughly and put on clean clothing
 Users must remove personal protective equipment immediately after handling this product Wash outside of gloves before removing As soon as possible wash thoroughly

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 OR PHYSICAL HAZARDS

Reaction with strong reducing agents may be explosive Avoid misting

DIRECTIONS FOR USE

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

DIRECTIONS FOR TREATING INDUSTRIAL RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS

NOTE Add this product separately to the system Do not mix it with other additives so as to avoid decomposition of this product due to the high pH of many additive formulations Add this product to the basin (or any other point of uniform mixing) Addition must 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

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FOR CONTROL OF BACTERIA

Add 0 00380 0 0380 gallons of this product/1000 gal 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 0192 0 0380 gal of this product /1000 gal of water in the system Repeat until control is achieved

Subsequent Dose When microbial control is evident add 0 0096 0 0380 gal of this product/1000 gal 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 0192 0 0380 gal of this product/ 1000 gal of water in the system

Subsequent Dose Maintain this level by pumping a continuous feed of 0 00380 0 0192 gal of this product/ 1000 gal 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 0 116 0 380 gallons of this product/1000 gal of water in the system depending on the severity of contamination

INTERMITTENT OR SLUG METHOD

Initial Dose When the system is noticeably fouled add 0 192 0 380 gal of this product/ 1000 gal of water in the system Repeat until control is achieved

Subsequent Dose When microbial control is evident add 0 116 0 380 gal of this product/1000 gal of water in 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 0 192 0 380 gal of this product/ 1000 gal of water in the system

Subsequent Dose Maintain this treatment level by pumping a continuous feed of 0 116 0 380 gal of this product/1000 gal 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 Add this product separately to the system Do not mix it with other additives so as to avoid decomposition of this product 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 this product at levels of 0 60 2 00 lbs /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 this product 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 first be boiled out then treated with 0 60 1 40 lbs of this product/ton (dry) of paper or pulp as necessary for control Moderately fouled systems should be treated continuously with 1 40 2 00 lbs of this product/ton (dry) of paper or pulp until the slime accumulation is controlled Subsequent rates can then be reduced to 0 60 1 40 lbs of this product/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 60 1 40 lbs of this product/ton (dry) of paper or pulp until the slime is controlled then added on an intermittent basis to maintain control

DIRECTIONS FOR TREATING NON POTABLE REVERSE OSMOSIS SYSTEMS

For controlling bacteria fungi and algae slimes in non potable Reverse Osmosis systems and peripheral equipment add this product to the system inlet water or before any other contamination area ahead of the Reverse Osmosis unit This product must 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 this product

Add this product at the rate of 0 04 to 4 0 lbs (5 to 480 ppm) per 1000 gals of feedwater During use of this product both permeate and reject waters must be directed to the drain Once treatment is completed

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rinsing with feedwater must continue until conductivity values in the permeate are at or below values before treatment with this product. Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF BACTERIA

Initial Dose When the system is noticeably fouled add this product at the rate of 0.2 to 0.4 lb (24 to 48 ppm) per 1000 gals of 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 add this product at the rate of 0.1 to 0.4 lb (12 to 48 ppm) per 1000 gals of feedwater as needed to maintain control 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 this product at the rate of 2.0 to 4.0 lbs (240 to 480 ppm) per 1000 gals of 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 add this product at the rate of 1.2 to 4.0 lbs (144 to 480 ppm) per 1000 gals of feedwater as needed to maintain control or as specified by guidelines recommended by the membrane manufacturer.

DIRECTIONS FOR TREATING METAL WORKING FLUIDS CONTAINING WATER

This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:25 to 1:1. 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 must be made with a metering pump.

Initial or Slug Dose When the system is noticeably fouled add this product at the rate of 1.1 gals (2.65 lbs) per 1000 gals of metalworking fluid in the system. Repeat until control is achieved.

Subsequent Dose When microbial control is evident add this product at the rate of 0.4 to 0.8 gal (1.06 to 2.12 lbs) per 1000 gals of metalworking fluid per day or as needed to maintain control. Additions of this product can be made continuously or intermittently. Slug the system as required.

DIRECTIONS FOR TREATING BREWERY PASTEURIZER WATER

For controlling (or inhibiting) the growth of bacteria, fungi, and yeasts in brewery pasteurizing water systems, add this product at a point in the system to ensure uniform mixing.

Initial or Slug Dose When the system is noticeably fouled add this product at the rate of 1.1 gals (2.65 lbs) per 1000 gals of water in the system. Repeat until control is achieved.

Subsequent Dose When microbial control is evident add this product at the rate of 0.4 to 0.8 gal (1.06 to 2.12 lbs) per 1000 gals of water per day or as needed to maintain control. Additions of this product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS

NOTE Add this product separately to the system. Do not mix it with other additives so as to avoid decomposition of this product due to the high pH of many additive formulations. Addition of this product 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 4.284 ppm this product (0.4256 gallons of this product per 2400 barrels of water) depending on the severity of contamination. Additions must be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD

When the system is noticeably fouled add 36.284 ppm this product (3.2256 gals of this product per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently treat with 4.53 ppm this product (0.448 gals of this product 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 36.284 ppm this product (3.2256 gals of this product 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.

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NOTE For control of bacteria yeast and fungi in aqueous solutions of biopolymer used in flooding operations add 53 284 ppm this product (4 8 25 6 gals of this product per 2400 barrels of water) Additions of this product must 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 0 006 0 380 gallons this product/1000 gal of water in the system 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 0 012 0 380 gal this product/1000 gal of water in the system Repeat until control is achieved

Subsequent Dose When microbial control is evident add 0 006 0 188 gal this product/1000 gal of water in the system every 2 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 0 012 0 380 gal this product/1000 gal of water in the system

Subsequent Dose Maintain this level by pumping a continuous feed of 0 006 0 188 gal this product/1000 gal of water 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

This product 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 this product to the material or product at a concentration of 100 to 8 000 ppm by weight This concentration is equivalent to 11 2 to 896 0 fluid ounces this product per 1 000 gallons or 85 6 to 6 848 0 milliliters this product per 1 000 liters 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 this product at a concentration of 4 0 to 40 0 ppm by weight of water being treated depending on the severity and contamination in the system Addition must be CONTINUOUS and must be made with a metering pump at a point in the system where mixing will be rapid and thorough Add this product 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 1 6 6 0 ppm of this product 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 must be CONTINUOUS and made at a point just after initial chlorine mixing Rapid mixing is necessary for maximum effectiveness This product must be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage and disposal

Pesticide Storage Store in a dark cool dry well ventilated area not above 104 F (40 C) in well closed original containers away from energy sources combustible organic materials oxidizers and moisture 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 respirator if misting occurs 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

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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

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 Handling and Disposal

{For rigid nonrefillable container less than or equal to 50 lbs}

[Container Handling Nonrefillable container Do not reuse or refill this container Triple rinse (or equivalent) promptly after emptying Triple rinse as follows Empty remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container / full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times

Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities by burning If burned stay out of smoke]

{For rigid nonrefillable container greater than 50 lbs}

[Container Handling Nonrefillable container Do not reuse or refill this container Triple rinse (or equivalent) promptly after emptying Triple rinse as follows Empty remaining contents into application or a mix tank Fill the container ¼ 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

Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities by burning If burned stay out of smoke]

[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 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]

MANUFACTURED FOR

**WATER SCIENCE TECHNOLOGIES
5520 PARKWOOD CIRCLE
BESSEMER AL 35022**

EPA Reg No 88714 R
EPA Est No

NET CONTENTS _____ GALS (LBS)

[BATCH/Lot No _____]

