B-Cap™ 34 Antimicrobial Agent

(ABNs: Durox, Durox LRA, Durox LRD, Durox LRS Type-S)

EPA Registration No. 72372-9
EPA Est. No. __________

For Industrial Use Only
Not for human consumption or household use

ACTIVE INGREDIENT:
Hydrogen Peroxide .......................................................... 34%

OTHER INGREDIENTS: ................................................. 66%

TOTAL: ........................................................................... 100%

KEEP OUT OF REACH OF CHILDREN
DANGER

[Note to Reviewer: In accordance with 40 CFR 156.68(d), all first aid statements, as prescribed, will appear on the front panel of the product label.]

B-Cap™ 34 Antimicrobial Agent is for the inhibition of non-public health biofouling and slime control in:
• Pulp and paper mill systems for non-food contact use
• Recirculating and once through cooling water systems
• Cooling water systems
• Process Waters
• Packaging and storage vessels

B-Cap™ 34 Antimicrobial Agent is for use in aseptic food processing operations to achieve commercial sterility of food packaging and equipment.

First Aid
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
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 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 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.
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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Precautionary Statements
Hazards to Humans and Domestic Animals
DANGER: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist. Wear goggles, face shield or safety glasses. Wear coveralls over long-sleeved shirt and long pants, socks, shoes, chemical-resistant gloves (Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyethylene, Polyvinyl Chloride (PVC), or Viton), and chemical-resistant apron when handling. Wear a minimum of a NIOSH-approved TC-19C full face supplied air respirators; OR NIOSH approved TC-13F Self-Contained Breathing Apparatus (SCBA); OR supplied air respirators with escape bottles. 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.

Environmental Hazards
This pesticide is toxic to birds, mammals, fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with 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.

Any solution released from the system should be diluted with water and tested for residuals to ensure that there is less than 3 ppm peroxygen remaining.

Physical or Chemical Hazards
Strong oxidizing agent. Do not use with or store near any oxidizing or reducing agents.

PeroxyChem, LLC
2005 Market St Ste 3200
Philadelphia PA 19103-7014
Net Contents: 55 Gallons (208 L) 500 lbs (227 kg)

and B-Cap™ are trademarks of PeroxyChem, LLC

ESL040620 REV040720 Page 1 of 3
DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

STORAGE: NEVER RETURN B-CAP™ 34 ANTIMICROBIAL AGENT TO THE ORIGINAL CONTAINER AFTER IT HAS BEEN REMOVED. Avoid all contaminants, especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of a decomposition, isolate container, douse container with cool water and dilute B-Cap™ 34 Antimicrobial Agent with large volumes of water.

Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store this product in a cool and dry area. Do not store on wooden pallets.

Procedure for Leak or Spill

Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares, or spark producing tools. Keep combustible and organic materials away. Flush spilled material with large quantities of water. Undiluted material should not enter confined spaces.

Disposal

Pesticide Disposal: If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.

B-Cap™ 34 Antimicrobial Agent, which is to be discarded, should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

Container Disposal

Nonrefillable containers less than 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Into the rinsate collection system at a point where uniform mixing can be achieved, e.g., basin, sump, or collection areas. The product can be used at the same application rates and in the same manner as described above. The solution should be added to the closed recirculating system or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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.

Nonrefillable containers greater than or equal to 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Into the rinsate collection system at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydropulper, fan pump, broke pump, etc. The product can be used at the same application rates and in the same manner as described above. The solution should be added to the closed recirculating system or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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. Empty drums are not returnable to PeroxyChem unless special arrangements have been made. Dispose of drums in accordance with local, state, and Federal regulations.

All Refillable containers. Refillable container. Refill this container with pesticide 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 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinseate collection system. Repeat this rinsing procedure two more times. Return to PeroxyChem for reuse.

STORAGE: NEVER RETURN B-CAP™ 34 ANTIMICROBIAL AGENT TO THE ORIGINAL CONTAINER AFTER IT HAS BEEN REMOVED. Avoid all contaminants, especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of a decomposition, isolate container, douse container with cool water and dilute B-Cap™ 34 Antimicrobial Agent with large volumes of water.

Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store this product in a cool and dry area. Do not store on wooden pallets.

Procedure for Leak or Spill

Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares, or spark producing tools. Keep combustible and organic materials away. Flush spilled material with large quantities of water. Undiluted material should not enter confined spaces.

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Pesticide Disposal: If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.

B-Cap™ 34 Antimicrobial Agent, which is to be discarded, should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

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B-Cap™ 34 Antimicrobial Agent

A cleaning agent used to inhibit slime and sulfate forming non-public health organisms in process waters, air washing systems, recirculating and once through water cooling towers and systems, including cooling water systems and industrial closed recirculating process water systems, and packaging and storage vessels.

Air Washers and Recirculating and Once Through Cooling Water Systems, (cooling towers, evaporative condensers). (Not for Use in California)

1. Severely fouled systems should be cleaned prior to treatment.
2. This product may be used in all types of cooling water systems that have mist-eliminating components. B-Cap™ 34 Antimicrobial Agent should be added at a point where uniform mixing can be achieved, for example the basin area. Addition may be intermittent or continuous. Hydrogen peroxide should not be mixed with other chemicals or additives without first checking for compatibility. Contamination with other chemicals could cause product decomposition.
   • Intermittent (Slug Dose) – For severely fouled systems add 3 to 163 fl oz of B-Cap™ 34 Antimicrobial Agent per 1000 gallons of water in the system, (10 to 489 ppm). Repeat until control is achieved. When control is evident add 1 to 31 fl oz of B-Cap™ 34 Antimicrobial Agent per 1000 gallons of water in system (3 to 93 ppm H2O2) as needed to maintain control.
   • Continuous Feed – Initial Dose: If the system is noticeably fouled, use slug dose procedure for the initial treatment. Once control is achieved, use a continuous feed of 0.3 to 16 fl oz B-Cap™ 34 Antimicrobial Agent per 1000 gallons of water per day in the system (1 to 48 ppm H2O2). Dosage rates should be increased or decreased depending on the extent of biofouling and control achieved, but may not exceed the specified dose rates.

Cooling Water Systems (Not for Use in California)

The product can be used at the same application rates and in the same manner as described above. The solution should be added to the closed recirculating system at a point where uniform mixing can be achieved, e.g., basin, sump, or collection areas.

Biofouling Control in Pulp and Paper Mill Systems (Not for Use in California)

For use in the manufacture of paper and paperboard intended for non-food contact only. Not for use in the manufacture of paper and paperboard intended for food contact.

The product can be used to inhibit non-public health organisms in pulp, paper and paperboard mills.

1. Severely fouled systems should be cleaned prior to treatment with B-Cap™ 34 Antimicrobial Agent. Add B-Cap™ 34 Antimicrobial Agent directly to the system, don’t mix with other chemicals or additives without first testing for compatibility. Contamination with other chemicals could result in product decomposition.
2. Add B-Cap™ 34 Antimicrobial Agent at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydropulper, fan pump, broke pump, etc.
3. Apply 1 to 40 fl oz of B-Cap™ 34 Antimicrobial Agent per ton of (dry basis) pulp or paper produced, (10 to 120 ppm H₂O₂). Addition may be continuous or intermittent depending on the type of system and severity of the biofouling.

**Process Water** (Not for Use in California)

B-Cap™ 34 Antimicrobial Agent may be used to aid in minimizing slime formation in process waters intended for use in precleaning hard non-porous surfaces, e.g., metals, glass or plastics prior to being painted, plated, or coated; cleaning pipes, equipment or other process equipment.

1. Add B-Cap™ 34 Antimicrobial Agent at a point in the system where it can be mixed uniformly. The quantity of product required will depend upon the severity of the fouling.
2. Apply 0.3 to 163 fl oz per 1000 gallons of water in the system (1 to 489 ppm). Once control is achieved, reduce application rate accordingly.

**Inhibition of Non-Public Health Slime, Bacteria, Fungi, and Other Microorganisms that are aesthetically or economically undesirable and/or odor causing bacteria in packaging and storage vessels such as railcars, trucks, ships, totes, IBCs tanks, etc. used to contain clays, calcium carbonate, titanium dioxide, barium sulfate, and other filler materials. (Not for Use in California)**

1. If treating the container or vessel in the field, place the vessel or container on an area with an impervious surface with controlled runoff. Ensure that the antimicrobial treatment solution will not be released to the environment.
2. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.
3. Prepare a dilute solution of the product by adding 1 to 4 volumes of B-Cap™ 34 Antimicrobial Agent to 11 volumes of potable water. This will provide solutions containing 3% to 10% hydrogen peroxide. Apply the diluted solution, at ambient or elevated temperatures, to the surface as a coarse spray, wipe/mop or flood to reduce non-public health bacterial and fungal contamination.
4. Allow antimicrobial agent to contact the surface for a period of time sufficient to ensure adequate cleaning. Depending on the microbial load, contact times can range from 5 to 30 minutes or longer.
5. Drain dry. Do not rinse.

**Aseptic Food Processing Operations**

B-Cap™ 34 Antimicrobial Agent is a ready to use solution. It may be used to achieve commercial sterility of food packaging materials and food processing equipment.

Apply B-Cap™ 34 Antimicrobial Agent on the exterior and interior of food containers and closure systems (caps, seals, etc.), or appropriate food processing equipment surfaces. Use techniques such as, but not limited to, immersion, coarse spray, or circulations to sterilize the equipment. Apply B-Cap™ 34 Antimicrobial Agent at a minimum temperature of 75ºC. The product must remain in contact with the packaging surface for a minimum of 20 seconds. This product, when used per label directions, is effective against *Bacillus subtilis* (ATCC 19659) and *Clostridium sporogenes* (ATCC 3584).

Such use must comply with all applicable FDA regulations, including but not limited to 21 CFR parts 108, 110, 113, and 114. Use in an aseptic food processing operation includes testing required for the process validation. Food subject to these FDA regulations may not be sold in a treated package until after the scheduled process for the food processing operation has been accepted by the FDA.

**Inhibition of Non-Public Health Bacteria and Fungi in Dispersed Pigments and Synthetic and Natural Polymers in Aqueous Solutions** (Not for Use in California)

B-Cap™ 34 Antimicrobial Agent can be used to inhibit non-public health bacteria and fungi in the manufacture and storage of dispersed pigments and aqueous polymers used in paint and paper production such as kaolin clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate, and kieselguhr and applications containing natural and synthetic polymer lattices based on acrylates, butadiene, PVA, styrene, and other monomers (e.g. water based emulsions, latexes, and dispersions).

Apply 1.3 to 8.9 gallons of B-Cap™ 34 Antimicrobial Agent solution to each 1,000 gallons of fluid. This will provide 500 ppm to 3,419 ppm of hydrogen peroxide. The hydrogen peroxide content for finished products is 0.05% (500 ppm) to 0.35% (3,419 ppm).

For open pouring systems, avoid breathing vapors, mist or gas. Be sure to use personal protective equipment including impervious gloves, impervious clothing and eye protection. Protective engineering solutions should be implemented and in use before PPE equipment is considered. This includes proper ventilation to maintain hydrogen peroxide levels below the OSHA PEL TWA of 1 ppm.

**Note:** This product may only be used as directed and may not be used to sterilize medical devices.

In all applications, always prepare a new solution daily to ensure effectiveness. Do not reuse solutions. Dispose of any unused solution.

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**EMERGENCY TELEPHONE NUMBERS (24 HOURS)**

MEDICAL: COLLECT 303-389-1409
CHEMTREC: 800-424-9300
OTHER: 281-474-8750

For more information see Safety Data Sheet

**Proper Shipping Name:**
Hydrogen peroxide, aqueous solution with not less than 20 percent but not more than 40 percent hydrogen peroxide.

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