

9009-15

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JAN 12 2011

Heather R. Bjornson, Agent for Online Packaging, Inc.  
c/o Technology Sciences Group, Inc.  
1150 18<sup>th</sup> Street, N.W. Suite 1000  
Washington, D.C. 20036

RE: Label Amendment Dated October 20, 2010  
Product Name: So White Brand Bleach and Disinfectant  
EPA Registration Number: 9009-15

Dear Ms. Bjornson:

The Agency has reviewed your application for amendment submitted in accordance with continuing registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, and determined the action acceptable with the following comments:

- The ingredient statement must have equal prominence so add bold typeface to "Other Ingredients";
- The first aid treatment protocols must be revised in the following descending order: Eyes, Skin, Swallowed, Inhaled;
- Correct the spelling of "Environmental" at Environmental Hazards heading;
- The Storage and Disposal instructions must be revised in accordance with Pesticide Registration Notice 2007-4. Your revisions must account for all sizes and types of containers for residential and commercial use sites;
- Add "sealed" to the heading Asphalt or Wood Roofs and Sidings;
- Under Sanitization of Non-Porous Food Contact Surfaces change "insure" to "ensure";
- Under Optional Label Claims delete "Kills 99.9% of Germs (on household surfaces)" as this claim is inconsistent with Agency policy;
- Under Optional Label Claims delete "Kills 99.9% of Germs on household germs" as this is an incorrect statement; and,
- Under Optional Label Claims delete the kills claim for *E.coli*.

In summary, you have requested the addition of two optional label claims, "germicidal" and "disinfects". We will allow disinfects as a marketing claim since you have provided data that does support disinfection. However, we will not accept the "germicidal" claim since the Agency's policy requires fungicidal data to support germ claims.

You must provide copies of your Certification with Respect to Child Resistant Packaging (40 CFR§157.20) for all containers less than 5 gallons within 30 days of the date of this letter.

# So White Brand Bleach and Disinfectant

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**Active Ingredient:**

Sodium Hypochlorite.....	5.25%
Other Ingredients.....	94.75%
Total.....	100.00%

Contains 5.0% available chlorine

## KEEP OUT OF REACH OF CHILDREN

## DANGER

See (side) (back) panel for first aid, additional precautionary statements, and directions for use

EPA Reg. No: 9009-15  
EPA Est. No.: XXXXX-XX-XXX

Net Content: XXX Gallons (XXX Liters)

**Manufactured By:**  
Online Packaging, Inc.  
Plover, WI 54457

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

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JAN 12 2011

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.

9009-15



FIRST AID

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<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or when going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals: DANGER: Corrosive.** May cause severe skin and eye irritation. Wear face shield or goggles and rubber gloves when handling this product. Do not get in eyes, on skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet. Open in a well ventilated area. Avoid breathing vapors. Vacate poorly ventilated area as soon as possible. Do not return until strong odors have dissipated. **PHYSICAL OR CHEMICAL HAZARDS: OXIDIZER.** Product contains a strong oxidizer. Always flush drains before and after use. Mix only with water according to label directions. Do not mix or use with other household products such as toilet bowl cleansers, rust removers, acid or products containing ammonia. To do so will release hazardous irritating gases. Flush drains before and after use. Extended contact with metals may cause discoloration or pitting.

*environmental*

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. 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.

STORAGE AND DISPOSAL:

Store away from children. Reclose cap tightly after use. Do not contaminate food or feed by storage, disposal or cleaning of equipment. Store this product upright in a cool dry area away from direct sunlight and heat to avoid deterioration.

DISPOSAL:

Non-refillable container. Do not refill or reuse container. Rinse container promptly after emptying. Offer empty container for recycling. If recycling is not available, discard container in trash. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.

*Must be revised per 2007-4*

DIRECTIONS FOR USE

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

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JAN 12 2011

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended for the pesticide, registered under EPA Reg. No.

9009-15

So White Brand Bleach and Disinfectant; EPA Reg. No.: 9009-15  
Label version (4) dated October 20, 2010

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## TO CLEAN AND DEODORIZE TRASH CANS

Use this product to clean and deodorize trash and garbage cans. After washing and rinsing, apply a solution containing ¼ cup of this product in 1 gallon of water. Allow surfaces to remain wet for 5 minutes.

## SANITIZATION

### LAUNDRY USAGE

Laundry: For top load machines add 1 cup. Front load machines add 3/4 cup per load. For use on white or colorfast cottons, linens, nylon, orlon and rayon. Always put the bleach into the washer first. Adding bleach after the clothes are in washer may ruin clothes.

REMOVING STAINS: Use only on colorfast material (be sure to test material in an inconspicuous place prior to bleaching). Soak in cold water for 10 minutes. Cleanse any starch out with a good detergent and rinse garment. Add 1 tablespoon of So-White Bleach to each quart of cold fresh water. Mix well and immerse garment for 10 minutes. Rinse well in clear water.

### HOUSEHOLD USAGE

DIAPER PAIL: Pre-soak, first flush out substantial matter. Use ¾ cup of So-White Bleach per gallon of water. Allow diapers to soak for 1 hour before washing.

TOILET BOWLS: To sanitize and deodorize pre-cleaned toilet bowls, use ½ cup of this product. Flush, pour in bleach - swab with brush, making sure to get under the rim, and let stand for 10 minutes. Flush. DO NOT use with bowl cleaners or any other household chemicals.

GARBAGE CANS – To sanitize garbage and trash cans, wash thoroughly with warm soapy solution. Rinse then spread a solution of 1 cup of this product per gallon of water over all surfaces. Let stand 5 minutes, then drain.

### PUBLIC WATER SYSTEMS

RESERVOIRS: ALGAE CONTROL - Hypochlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

MAINS - Thoroughly flush section to be sanitized by discharging from hydrants. Permit water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 PPM is obtained at the low-pressure end of the new main section after a 24-hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

NEW TANKS, BASINS, ETC. - Remove all physical soil from surfaces. Place 48 oz. of this product for each 5 cubic feet of working capacity (500-PPM available chlorine). Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to surface.

NEW FILTER SAND - Apply 190 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

NEW WELLS - Flush the casing with a 50-PPM available chlorine solution of water containing 13 oz. of this product for each 100 gallons of water. The solution should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for several hours or overnight under chlorination. It may then be pumped until a representative raw water sample is obtained. Bacterial examination of the water will indicate whether further treatment is necessary.

EXISTING EQUIPMENT - Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by placing 50 oz. of this product for each 5 cubic feet capacity (approximately 500-PPM available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing 13 oz. of this

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with COMMENTS  
EPA Label  
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Federal Insecticide,  
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defined in the pesticide,  
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product for each 5 gallons of water (approximately 1000-PPM available chlorine). After drying, flush with water and return to service.

**COOLING TOWER/EVAPORATIVE CONDENSER WATER**

**SLUG FEED METHOD** • Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 PPM available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 25 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 PPM. Badly fouled systems must be cleaned before treatment is begun.

**INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 PPM available chlorine.

Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 25 oz. of this product per 10,000 gallons of water in the system to obtain a 1-PPM residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

**CONTINUOUS FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 PPM available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 3 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 PPM residual. Badly fouled systems must be cleaned before treatment is begun.

**PULP AND PAPER MILL PROCESS WATER SYSTEMS**

**SLUG FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 PPM available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 25 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 PPM. Badly fouled systems must be cleaned before treatment is begun.

**INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 PPM available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 25 oz. of this product per 10,000 gallons of water in the system to obtain a 1-PPM residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

**CONTINUOUS FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 122 to 244 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 PPM available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 3 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 PPM residual. Badly fouled systems must be cleaned before treatment is begun.

with comments  
in EPA Letter Dated:  
JAN 18 2011

the Federal Insecticide,  
the recommended rate  
for the pesticide,  
under FIFRA No. 9009-15

6/12

**AQUACULTURAL USES**

**FISH PONDS** - Remove fish from ponds prior to treatment. Thoroughly mix 244 oz. of this product to 10,000 gallons of water to obtain 10 PPM available chlorine. Add more product to the water if the available chlorine level is below 1 PPM after 5 minutes. Return fish to pond after the available chlorine level reaches zero.

**FISH POND EQUIPMENT** - Thoroughly clean all equipment prior to treatment. Thoroughly mix 5 oz. of this product to 10 gallons of water to obtain 200 PPM available chlorine. Porous equipment should soak for one hour.

**MAINE LOBSTER PONDS** - Remove lobsters, seaweed, etc. from ponds prior to treatment. Drain the pond. Thoroughly mix 14,629 oz. of this product to 10,000 gallons of water to obtain at least 600 PPM available chlorine. Apply so that all barrows, gates, rocks and dams are treated with product. Permit high tide to fill the pond and then close the gates. Allow water to stand for 2 to 3 days until the available chlorine level reaches zero. Open and allow 2 tidal cycles to flush the pond before returning lobsters to the pond.

**CONDITIONING LIVE OYSTERS** - Thoroughly mix 13 oz. of this product to 10,000 gallons of water at 50 to 70 degrees F to obtain 0.5 PPM available chlorine. Expose Oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 PPM. Repeat entire process if the available chlorine level drops below 0.05 PPM or the temperature falls below 50 degrees F. (Not for use In California.)

**CONTROL OF SCAVENGERS IN FISH HATCHERY PONDS** - Prepare a solution containing 200 PPM of available chlorine by mixing 5 oz. of product with 10 gallons of water. Pour into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to 0 PPM, as determined by a test kit.

**ASPHALT OR WOOD ROOFS AND SIDINGS**

*Sealed*

To control fungus and mildew, first remove all physical soil by brushing and hosing roofs and sidings with clean water. Prepare a solution containing 5000 PPM available chlorine by mixing 13 oz. of this product per gallon of water. Brush or spray roof or sidings with the 5000-PPM solution. After 30 minutes, rinse by hosing with clean water. [Not for use in California.]

**BOAT BOTTOMS**

To control slime on boat bottoms, sling a plastic tarp under boat, retaining enough water to cover the fouled bottom area, but not allowing water to enter enclosed area. This envelope should contain approximately 500 gallons of water for a 14-foot boat. Add 43 oz. of this product to this water to obtain a 35-PPM available chlorine concentration. Leave immersed for 8 to 12 hours. Repeat if necessary. Do not discharge the solution until the chlorine level has dropped to 0 PPM, as determined by a swimming pool test kit. [Not for Use in California]

**SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES**

**RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 5 oz. of this product with 10 gallons of water to provide approximately 200 PPM available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 5 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing in an immersion tank, 5 oz. of this product with 10 gallons of water to provide approximately 200 PPM available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 5 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

**SPRAY/FOGGING METHOD** - Preclean all surfaces after use. Prepare a 200-PPM available chlorine sanitizing solution of sufficient size by thoroughly is mixing the product in a ratio of 5 oz. product with 10 gallons of water. Use spray or fogging equipment, which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

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Under the Federal Insecticide,  
Fungicide and Rodenticide Act  
and related provisions,  
registered under EPA Reg. No. 9009-15

So White Brand Bleach and Disinfectant; EPA Reg. No.: 9009-15  
Label version (4) dated October 20, 2010

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### SANITIZATION OF POREOUS NON-FOOD CONTACT SURFACES

**RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 15 oz. of this product with 10 gallons of water to provide approximately 600 PPM available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 5 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing in an immersion tank, 155 oz. of this product with 10 gallons of water to provide approximately 600 PPM available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 5 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

**SPRAY/FOG METHOD** - After cleaning, sanitize non-food contact surfaces with 600 PPM available chlorine by thoroughly mixing the product in a ratio of 15 oz. of this product with 10 gallons of water. Use spray or fogging equipment, which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

### SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

*ensure*

**RINSE METHOD** - A solution of 100-PPM available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100-PPM available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 PPM. Prepare a 100-PPM sanitizing solution by thoroughly mixing 3 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 5 oz. of this product with 10 gallons of water to provide approximately 200 PPM available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 5 minutes. If solution contains less than 50-PPM available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200-PPM residual. Do not rinse equipment with water after treatment and do not soak equipment overnight. Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

**IMMERSION METHOD** - A solution of 100 PPM available chlorine may be used in the sanitizing solution if chlorine test kit is available. Solutions containing an initial concentration of 100-PPM available chlorine must be tested and adjusted periodically to ensure that the available chlorine does not drop below 50 PPM. Prepare a 100-PPM sanitizing solution by thoroughly mixing 3 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 5 oz. of this product with 10 gallons of water to provide approximately 200 PPM available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 5 minutes and allow the sanitizer to drain. If solution contains less than 50-PPM available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200-PPM residual. Do not rinse equipment with water after treatment. Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.

**FLOW/PRESSURE METHOD** - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200-PPM available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 5-oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 5 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50-PPM available chlorine. Rinse system with potable water prior to use.

**CLEAN-IN-PLACE METHOD** - Thoroughly clean equipment after use. Prepare a volume of a 200-PPM available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 5-oz. product with 10 gallons of water. Pump solution through the system until full

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flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50-PPM available chlorine. Rinse system with potable water prior to use.

**SPRAY/FOG METHOD** - Preclean all surfaces after use. Use a 200-PPM available chlorine solution to control bacteria, mold or fungi and a 600-PPM solution to control bacteriophage. Prepare a 200-PPM sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 5-oz. product with 10 gallons of water. Prepare a 600-PPM solution by thoroughly mixing the product in a ratio of 15-oz. product with 10 gallons of water. Use spray or fogging equipment, which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with 600-PPM solution with a 200-PPM solution.

**To Clean and Sanitize Milking Equipment AND UTENSILS:** It is important to clean out large deposits of milk or other organic before applying this product/water solution.

Immediately after milking, flush equipment with clean, lukewarm water. Dismantle equipment after each milking and wash it (including all rubber parts and stanchion hoses) and all utensils with a solution prepared by thoroughly mixing 1 oz of your regular detergent with each gallon of a 200 ppm available chlorine solution. Water temperature should be 100° F to 130° F. **(Do not mix this product with acid cleaners or milk stone removers.)** Rinse equipment and utensils thoroughly with clean, clear water, drain. Air dry. Immediately before use, rinse equipment and/or utensils with a 200 ppm available chlorine sanitizing solution for 2 minutes; drain thoroughly.

If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard solution or add sufficient product to reestablish 200 ppm sanitizing solution.

**RESTAURANTS, TAVERNS, SODA FOUNTAINS, DAIRIES, ETC.  
DIRECTIONS FOR SANITIZING EATING AND DRINKING UTENSILS:**

Prepare sanitizing solution immediately prior to use.

1. Scrape and pre-wash utensils and glass whenever possible.
2. Wash with good detergent or compatible cleaner.
3. Rinse with clean water.
4. Sanitize in solution of 1 Tablespoon to 2 gallons of water (200 PPM).
5. Immerse utensils at least 2 minutes or for contact time specified by governing sanitary code.
6. Do not reuse sanitizing solution.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JAN 12 2011

Sanitizing and Disinfecting  
Solutions  
EPA Reg. No. 9009-15

9009-15

**SANITIZING OF POROUS FOOD CONTACT SURFACES**

**RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 15 oz. of this product with 10 gallons of water to provide 600 PPM available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse with water and do not soak equipment overnight.

**IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing in an immersion tank, 15 oz. of this product with 10 gallons of water to provide 600 PPM available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution, maintaining contact for at least 2 minutes and allow the sanitizer to drain. Do not rinse with water and do not soak equipment overnight.

add period & 2 spaces

**SPRAY/FOG METHOD** - Preclean all surfaces after use. Prepare a 600-PPM available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 15-oz. product with 10 gallons of water. Use spray or fogging equipment, which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces with a 200-PPM available chlorine solution. Prepare a 200-PPM sanitizing solution by thoroughly mixing 5 oz. of this product with 10 gallons of water.



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**AGRICULTURAL USES**

**POST-HARVEST PROTECTION** - Potatoes can be sanitized after cleaning and prior to storage by spraying with a sanitizing solution at a level of 1 gallon of sanitizing solution per ton of potatoes. Thoroughly mix 3 oz. of this product to 2 gallons of water to obtain 500 PPM available chlorine.

Disinfect leaf cutting bee cells and bee boards by immersion in a solution containing 1-PPM available chlorine for 3 minutes. Allow cells to drain for 2 minutes and dry for 4 to 5 hours or until no chlorine odor can be detected. This solution is made by thoroughly mixing 2 tsp. of this product to 100 gallons of water. The bee domicile is disinfected by spraying with a 0.1-PPM solution until all surfaces are thoroughly wet. Allow the domicile to dry until all chlorine odors have dissipated. (Not for use in California.)

**FOOD EGG SANITIZATION** - Thoroughly clean all eggs. Thoroughly mix 5 oz. of this product with 10 gallons of warm water to produce a 200-PPM available chlorine solution. The sanitizer temperature should not exceed 130 degrees F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

**FRUIT & VEGETABLE WASHING** - Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 11 oz. of this product in 200 gallons of water to make a sanitizing solution of 25-PPM available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

**ARTIFICIAL SAND BEACHES**

To sanitize the sand, spray a 500-PPM available chlorine solution containing 11 oz. of this product per 10 gal. of water at frequent intervals. Small areas can be sprinkled with a watering can. [Not for Use in California.]

**SANITIZATION OF DIALYSIS MACHINES**

Flush equipment thoroughly with water prior to using this product. Thoroughly mix 15 oz. of this product to 10 gallons of water to obtain at least 600 PPM available chlorine. Immediately use this product in the hemodialysate system allowing for a minimum contact time of 15 minutes at 20 degrees C. Drain system of the sanitizing solution and thoroughly rinse with water. Discard hemodialysate and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to ensure that no available chlorine remains in the system.

This product is recommended for decontaminating single and multi-patient hemodialysate systems. This product has been shown to be an effective disinfectant (virucide, fungicide, bactericide, pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysate delivery systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. This product should be used in a disinfectant program that includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT recommended for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysate systems that are available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021.

**VIRUCIDE**

When used as directed, this product is effective against *Influenza A*, and *Rhinovirus type 37* on treated surfaces.

Apply 1/8 ounce per gallon of this product to hard, non-porous surfaces and allow treated surface to remain wet for at least 5 minutes.

ACCEPTED with COMMENTS from EPA Letter Dated:

JAN 12 2011

General Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide, registered under FIFRA Reg. No. 9009-15

# DISINFECTION

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When used as directed, this product is effective against *Salmonella enterica*, *Staphylococcus aureus*, *Influenza A*, and *Rhinovirus type 37* on treated surfaces. This product can be used in police and fire vehicles, jails, detention centers, hotels, schools, industrial clean rooms, health spas, day care facilities, barber and beauty salons, homes, farms, and poultry houses,

**DISINFECTING WALLS, FLOORS, AND OTHER HARD INANIMATE SURFACES NOT IN DIRECT CONTACT WITH FOOD IN KITCHENS, BATHROOMS AND AROUND THE HOUSEHOLD:** Preclean surfaces and rinse. Mix 1.5 ounces per gallon of water. Spray, rinse, or wipe surface with bleach solution and let stand for 5 minutes. Drain and air-dry.

This product may be applied to floors, counters, sinks made from stainless steel, glass, corian™, acrylic, glazed ceramic tile, porcelain, and hard plastics.

## DISINFECTION OF NONPOROUS NON-FOOD CONTACT SURFACES

**RINSE METHOD** - Prepare a disinfecting solution by thoroughly mixing 15 oz. of this product with 10 gallons of water to provide approximately 600 PPM available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the disinfecting solution, maintaining contact with the solution for at least 5 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**IMMERSION METHOD** - Prepare a disinfecting solution by thoroughly mixing in an immersion tank, 15 oz. of this product with 10 gallons of water to provide approximately 600 PPM available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the disinfecting solution for at least 5 minutes and allow the disinfectant to drain. Do not rinse equipment with water after treatment.

## SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfecting of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, to confirm that coliform bacteria has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction. On the average, satisfactory disinfecting of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 PPM after 15 minutes contact. Although the chlorine residual is the critical factor in disinfecting, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfecting.

1. **Mixing:** It is imperative that the product and the wastewater are instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. **Contacting** upon flash mixing, the flow through the system must be maintained.
3. **Dosage/Residual Control:** Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0-PPM chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 PPM after 15 minutes contact time.

## SEWAGE AND WASTEWATER TREATMENT

**EFFLUENT SLIME CONTROL** - Apply a 100 to 1000-PPM available chlorine solution at a location, which will allow complete mixing. Prepare this solution by mixing 25 to 244 oz. of this product with 100 gallons of water. Once control is evident, apply a 15-PPM available chlorine solution. Prepare this solution by mixing 5 oz. of this product with 100 gallons of water.

**ACFILTER BEDS - SLIME CONTROL:** Remove filter from service, drain to a depth of 1 ft. above filter sand and add 190 oz. of product per 20 sq./ft evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

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## DISINFECTION OF DRINKING WATER (EMERGENCY/PUBLIC/INDIVIDUAL/SYSTEM)

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**PUBLIC SYSTEMS** - Mix a ratio of 3 oz. of this product to 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 PPM and no more than 0.6 PPM is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.

**INDIVIDUAL SYSTEMS: DUG WELLS** - Upon completion of the casing (lining), wash the interior of the casing (lining) with a 100 PPM available chlorine solution using a stiff brush. This solution can be made by thoroughly mixing 3 oz. of this product into 10 gallons of water. After covering the well, pour the disinfecting solution into the well through both the pipe sleeve opening and the pipeline. Wash the exterior of the pump cylinder also with the sanitizing solution. Start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Consult your local Health Department for further details.

**INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVEN & BORED WELLS** - Run pump until water is as free from turbidity as possible. Pour a 100-PPM available chloride sanitizing solution into the well. This solution can be made by thoroughly mixing 3 oz. of this product into 10 gallons of water. Add 5 to 10 gallons of clean, chlorinated water to the well in order to force the sanitizer into the rock formation. Wash the exterior of the pump cylinder with the sanitizer. Drop pipelines into the well, start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours, flush well until all traces of chlorine have been removed from the water. Deep wells with high water levels may necessitate the use of special methods for introduction of the sanitizer to the well. Consult your local Health Department for further details.

**INDIVIDUAL WATER SYSTEMS: FLOWING ARTESIAN WELLS** - Artesian Wells generally do not require disinfection. If analyses indicate persistent contamination, the well should be disinfected. Consult your local Health Department for further details.

### EMERGENCY DISINFECTION AFTER FLOODS

**WELLS** - Thoroughly flush contaminated casing with a 500-PPM available chlorine solution. Prepare this solution by mixing 13 oz. of this product with 10 gallons of water. Backwash the well to increase yield and reduce turbidity, adding sufficient chlorinating solution to the backwash to produce a 10 PPM available chlorine residual, as determined by a chlorine test kit. After the turbidity has been reduced and the casing has been treated, add sufficient chlorinating solution to produce a 50 PPM available chlorine residual. Agitate the well water for several hours and take a representative water sample. Retreat well if water samples are biologically unacceptable.

**RESERVOIRS** - In case of contamination by overflowing streams, establish hypo chlorinating stations upstream of the reservoir. Chlorinate the inlet water until the entire reservoir obtains 0.2-PPM available chlorine residual, as determined by a suitable chlorine test kit. In case of contamination from surface drainage, apply sufficient product directly to the reservoir to obtain a 0.2-PPM available chlorine residual in all parts of the reservoir.

**BASINS, TANKS, FLUMES, ETC.** - Thoroughly clean all equipment, then apply 48 oz. of product per 5 cu. ft. of water to obtain 500 PPM available chlorine, as determined by a suitable test kit. After 24 hours, drain, flush, and return to service. If the previous method is not suitable, spray or flush the equipment with a solution containing 13 oz. of this product for each 5 gallons of water (1000-PPM available chlorine). Allow to stand for 2 to 4 hours, flush and return to service.

**FILTERS** - When the sand filter needs replacement apply 190 oz. of this product for each 150 to 200 cubic feet of sand. When the filter is severely contaminated, additional product should be distributed over the surface at the rate of 100 oz. per 20 sq. ft. Water should stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be backwashed of mud and silt, apply 190 oz. of this product per each 50-sq. ft., allowing the water to stand at a depth of 1 foot above the filter sand. After 30 minutes, drain water to the level of the filter. After 4 to 6 hours, drain, and proceed with normal backwashing.

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DISTRIBUTION SYSTEM - Flush repaired or replaced section with water. Establish a hypochlorinating station and apply sufficient product until a consistent available chlorine residual of at least 10-PPM remains after 24-hour retention time. Use a chlorine test kit.

**EMERGENCY DISINFECTION AFTER MAIN BREAKS**

MAINS - Before assembly of the repaired section, flush out mud and soil. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual of test of 50 PPM is obtained at the low-pressure end of the new main section after a 24-hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

**FARM PREMISES**

Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors walls and surfaces of barns, pens, stalls, chutes and other facilities occupied or traversed by animals or poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a use solution of at least-1000 PPM available chlorine for a period of 10 minutes. A 1000-PPM solution can be made by thoroughly mixing 2.5 oz. of this product with 10 gallons of water. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels, and scrapers used for removing litter and manure. Ventilate buildings, cars, boats, and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains, and waters must be rinsed with potable water before reuse.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

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Department of Agriculture  
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