

87508-3

12/4/2013

1/5-



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Mr. Kevin R. Kutcel, Agent for OdorStar LLC.
KRK Consulting LLC
5807 Churchill Way
Medina, OH 44256

DEC 4 2013

Subject: **Performacide**

EPA Registration No. 87508-3
Application Date: July 19, 2013
Receipt Date: July 23, 2013

Dear Mr. Kutcel:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Section 3 (c)(5), is acceptable. In summary, you have revised your label and submitted product chemistry data for sodium chlorite in order to prove that attain a full strength chlorine dioxide solution can be achieved in one hour instead of the former six hour time period.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

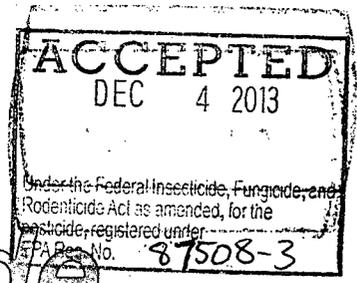
A copy of your stamped label accepted label is enclosed. If you have any questions or comments with regard to this Agency letter, please contact Nathan Mottl via email at mottl.nathan@epa.gov or by telephone at 703-305-0208.

Sincerely,

A handwritten signature in black ink, appearing to read "Demson Fuller", with a long horizontal flourish extending to the right.

Demson Fuller
Acting Product Manager Team 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

2/5



Performacide

**DISINFECTANT/SANITIZER/TUBERCULOCIDE/VIRUCIDE*
FUNGICIDE/ALGAECIDE/SLIMICIDE/DEODORIZER**

PRODUCES 0.5 gallons (1 gallon, 5 gallons, 30 gallons) OF 500 PPM CHLORINE DIOXIDE SOLUTION WHEN ACTIVATED

When used as directed, Performacide, a chlorine dioxide-generating product, is proven effective as: a disinfectant against methicillin-resistant *S. aureus* (MRSA) (ATCC 33592), *Staphylococcus aureus* (ATCC 6538), *Pseudomonas aeruginosa* (ATCC 15442), *Listeria monocytogenes* (ATCC 19111), *Trichophyton mentagrophytes* (athlete's foot) (ATCC 9533), vancomycin-resistant *Enterococcus faecalis* (ATCC 51299), *Salmonella enteric* (ATCC 10708), *Mycobacterium bovis* (TB) (ATCC 35737), and *Candida albicans* (ATCC 10232); a virucide* against *Human Immunodeficiency Virus Type 1 (HIV-1)* (HTLV-III), *Hepatitis A (HM-175)*, *Herpes Simplex-2* (ATCC VR-734), *Rhinovirus type 37* (ATCC VR-1147), *Influenza-A virus* (ATCC VR-544), *Coronavirus* (ATCC VR-740), *Poliovirus-1* (ATCC VR-1000), *Feline Calicivirus* (ATCC VR-782), *Rotavirus (WA)*, *Canine Parvovirus* (ATCC VR-2017), *Adenovirus type 5* (ATCC VR-5), *Vaccinia Virus* (ATCC VR-119), and *Norovirus (feline calici used as testing surrogate)* (ATCC VR-782); an algaecide (*Phormidium boneri*); a sanitizer against *S. aureus* (ATCC 6538), *Salmonella typhimurium* (MDRS) (ATCC 13311), *Klebsiella pneumonia* (ATCC 4352), *E. coli* (ATCC 11229), *E. coli O157:H7* (ATCC 43895), and *Listeria monocytogenes* (ATCC 19111); and a fungicide against *Fusarium solani* (ATCC 36031), *Botrytis Sp* and *Penicillium digitatum* (ATCC 201167); kills odor-causing bacteria, mold and mildew.

Active Ingredient:	
Sodium Chlorite:.....	30.5%
Other Ingredients:.....	69.5%
Total:.....	100.0%

DANGER
KEEP OUT OF REACH OF CHILDREN
(See back panel for other cautions)

Amount of Chlorine Dioxide generated = 0.05%

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 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 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 Inhaled: Remove victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice. Get medical attention.
Have the product container or label with you when calling poison control center, doctor or going for treatment. For emergency information concerning this product, call the National Pesticides information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Tim (NPIC). Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Registration No. 87508-3 EPA Establishment No. 62788-AL-001
Manufactured by Odorstar, LLC 4041 SW 47 Avenue Fort Lauderdale, FL 33314
www.odorstar.com
Net Weight: 0.42, 0.84, 4.2, 25.2 ounces

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Dry ingredients: corrosive. Harmful if swallowed. Avoid breathing vapors. Causes irreversible eye damage and skin burns. Wear (protective eyewear such as goggles, face shield, or safety glasses and gloves). 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. **ACTIVATED SOLUTION:** Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

PHYSICAL OR CHEMICAL HAZARDS

DRY SODIUM CHLORITE IS NOT COMPATIBLE WITH ANY REDUCING AGENTS, COMBUSTIBLE MATERIALS, SOLVENTS, ACIDS, PAINTS OR SULFUR-CONTAINING RUBBER. KEEP ACTIVATED SOLUTION AWAY FROM HEAT, SPARKS AND LIGHT. CHLORINE DIOXIDE GAS CAN BECOME CONCENTRATED IN OPEN AREA OF POUCH. ALWAYS OPEN ACTIVATED POUCH AND DILUTE ACTIVATED SOLUTION IN AN OPEN, WELL-VENTILATED AREA.

NOTE: This product is intended only for use in the institutional or commercial applications described below. This product is not to be used in households or anywhere young children may be present.

DIRECTIONS FOR USE:

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

This product, when used in accordance with Directions on hard, non-porous surfaces such as stainless steel, glass, vinyl, polypropylene, PVC or other hard non-permeable surfaces, is an effective disinfectant, sanitizer, algicide, tuberculocide, fungicide, general-purpose antimicrobial and surface cleaner. Applications include medical laboratories, hospitals, rehabilitation facilities, diagnostic centers, clinics, first-responder facilities and equipment, veterinary hospitals, medical equipment, pharmaceutical facilities and laboratories, as well as food processing and serving facilities, beverage bottling facilities. The formulation may be applied via mop, sprayer or sponge, with heavily-soiled surfaces pre-cleaned as needed by means of a non-disinfectant cleaning agent. Formula must be applied to ensure visible wetness of surface to be treated. If applied using pressurized sprayer, user must wear NIOSH/OSHA approved respirator and goggles. Heavily soiled surfaces must be pre-cleaned prior to treatment.

To activate the system, add the pouch to the correct amount of water and agitate as indicated by the table below:

Size of Pouch	0.42 oz (wt)	0.84 oz (wt)	4.2 oz (wt)	25.2 oz (wt)
Amount of Water	0.5 gallon	1 gallon	5 gallon	30 gallons

Solution will be usable in 60 minutes (1 hour).

NOTE: Allow ONE (1) HOUR BEFORE USE TO ENSURE SOLUTION REACHES FULL STRENGTH. Be sure to agitate upon addition of the pouch to the water and before initial use. Temperature must be kept between 20-25°C.

1. Use only in a well-ventilated area. Use eye and skin protection during preparation and during use (goggles, gloves, mask and protective clothing). Do not inhale fumes or allow spray to come into contact with eyes or skin. Shake formula before use. Make sure that spray nozzle is pointed away from user at all times.
2. Contact Manufacturer for recommendations regarding dilutions, contact times or other specific applications. Prior to use, verify formula concentration via chlorine dioxide test strips to determine appropriate concentration (contact manufacturer for recommendations if test strips indicate lower-than-desired concentration).
3. Prior to use, refer to expiration date on pouch; do not use product after expiration date. If any formula remains unused, pour unused formula into an oxidation-proof, dark closed or sealed container in a cool, dark location that is not subject to any sunlight and is separate from any food for human or animal consumption, making sure to use stored formula within 15 days of activation. Record activation date onto the container. Dispose of stored formula after 15 days.

4/5

Use the following dilution instructions: All dilutions are based upon a nominal concentration of 500 ppm. Use the following instructions to achieve the use concentration indicated:

To Achieve Use Concentration of:	Use Dilution Device or Sprayer With a Dilution Ratio of:
100 ppm	1:5 (one part 500 ppm solution to 4 parts water)
50 ppm	1:10 (one part 500 ppm solution to 9 parts water)
20 ppm	1:25 (one part 500 ppm solution to 24 parts water)
5 ppm	1:100 (one part 500 ppm solution to 99 parts water)
0.25 ppm	1:2,000 (one part 500 ppm solution to 1,999 parts water)

To Achieve 100 ppm:

Size of Pouch	0.042 oz	0.17 oz	0.84 oz	3.36 oz	5.0 oz
Water	1 quart	1 gallon	5 gallon	20 gallon	30 gallon

DISINFECTANT OR VIRUCIDE* FOR HARD, NON-POROUS SURFACES: Product must be used with an exposure time of 10 minutes at 100 ppm to disinfect hard surfaces in medical or veterinary facilities to decontaminate *Human Immunodeficiency Virus Type 1 (HIV-1)*, *Herpes Simplex-2*, methicillin-resistant *S. aureus (MRSA)*, vancomycin-resistant *Enterococcus faecalis*, *Staphylococcus aureus*, *Feline Calicivirus*, *Pseudomonas aeruginosa*, *Salmonella enterica*, *Mycobacterium bovis (TB)*, *Trichophyton mentagrophytes* (athlete's foot), *Candida albicans*, *Listeria monocytogenes*, *Corona virus*, *Hepatitis A*, *Poliiovirus-1*, *Rotavirus*, *Influenza-A virus*, *Rhinovirus type 37*, *Canine Parvovirus*, *Adenovirus type 5*, *Vaccinia*, and *Norovirus*. This product must be also used as a virucide* or disinfectant on hard, non-permeable, non-porous surfaces. Dilute to 100 ppm as table above specifies.

SANITIZER FOR HARD, NON-POROUS, NON-FOOD-CONTACT SURFACES: Formula may be used to sanitize and disinfect non-food contact surfaces at a dilution ratio of 20 ppm and an exposure time of 5 minutes against *Listeria monocytogenes*, *Staphylococcus aureus* and/or *Klebsiella pneumonia* and. Formulation may be applied to non-food contact surfaces, to include but not be limited to walls, furniture, floors, and equipment. Dilute to 20 ppm as table above specifies.

SANITIZER FOR HARD, NON-POROUS, FOOD-CONTACT SURFACES: Effective food contact surface sanitizer at an exposure time of 1 minute at a dilution of 5 ppm against *E. coli* and *E coli O157:H7*, *Staphylococcus aureu* and *Salmonella typhimurium (MDRS)*. Product may be used on previously cleaned food preparation surfaces; fountain drink and beverage dispensers; glassware, plates and eating utensils and food and beverage processing equipment at a dilution ratio of 5 ppm and an exposure time of 5 minutes.

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATING SURFACES AND OBJECTS PREVIOUSLY SOILED WITH BLOOD BODY FLUIDS POTENTIALLY CONTAINING HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1).

- When handling items soiled with blood or body fluids user must wear protective barriers, including gowns, masks, eye protection and latex gloves.
- Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of formulation.
- Blood, body fluids, bandages and any contaminated items must be autoclaved and disposed of according to local regulations for infectious waste disposal.

ANTIMICROBIAL APPLICATIONS FOR WATER-BASED CUTTING FLUIDS/OILS: This product will help inhibit, control and remove odor-causing bacteria, slimes and other organic growth in water-based cutting oils and attendant systems. The formula can be used for batch treatments, shock treatments or for continuous operation in and for small-volume systems. Use a 500 ppm solution for each 100 gallons of cutting oil in the system, adding between 0.2 and 2 gallons of the 500 ppm solution, subject to the amount of contamination and the desired frequency of treatment.

SANITIZING FINAL RINSE OF PRE-CLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS. This product may be used as a final sanitizing rinse for plastic, glass or metal returnable and non-returnable beverage containers, to include bottles, cans, and kegs. Using a device with a 6:100 dilution ratio (six parts solution to 94 parts water), use a 500 ppm solution to produce an end application concentration of 30 ppm. Rinse bottles, cans, or other containers with the use solution, ensuring visible wetness. Allow to drain dry.

5/5

TO EXTEND SHELF-LIFE OF FRUITS AND VEGETABLES. This product may be used for 1 minute at a dilution of 5 ppm in food processing facilities in order to control spoilage microorganisms on raw agricultural commodities (RACs). Apply via sprayer or dip RACs into formulation, followed by a rinse with potable water or by cooking, blanching or canning. Dilute to 5 ppm as table above specifies.

FRUIT AND VEGETABLE RINSE ANTIMICROBIAL APPLICATIONS / TO CONTROL THE BUILDUP OF MICROBES IN PROCESS WATERS FOR ASSOCIATED LINES, TANKS AND FLUMES. This product will control and inhibit the build-up of microbes in water used to process fruits and vegetables. The recommended residual concentrations of chlorine dioxide are between 0.25 ppm and 5.0 ppm. Dilute to 0.25 ppm or 5 ppm as table above specifies. In order to maintain desired concentration, inject formulation to the system either continuously or intermittently as needed. Frequency and volume of replenishment is subject to the severity of contamination of vegetables and fruits being processed, as well as target concentration, and process design.

ANTIMICROBIAL AND GENERAL CLEANING APPLICATIONS FOR POTABLE WATER SYSTEMS: This product is effective as a means of reducing microbial populations in potable water holding tanks and lines of boats or RVs (recreational vehicles), as well as in the wastewater lines and tanks of boats and RVs. It can also be used in beverage equipment including fountain drink equipment and related storage, transfer and dispensing lines of this equipment. It is also effective when used to clean such equipment to remove organic materials and eliminate/prevent odors. Any such use must be followed by a thorough rinsing with potable water. To achieve a level of 50 ppm, use one activated pouch (2 liters) for each 50 gallons of tank or line capacity, rounding up to the next higher number of pouches (i.e., using two pouches to treat a 100-gallon tank, or four pouches to treat two 80-gallon tanks with a combined capacity of 160 gallons).

DISINFECTANT FOR CLEAN-IN-PLACE APPLICATIONS FOR POTABLE WATER SYSTEMS: This formula is effective as a disinfectant for potable water lines or fountain drink or other beverage preparation, storage, transfer and dispensing equipment that have or may have been contaminated with methicillin-resistant *S. aureus*, vancomycin-resistant *Enterococcus faecalis*, *Salmonella enteric*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* and/or *Candida albicans*). Dilute as table above specifies to either 100 ppm solution for a 10-minute exposure time or to 50 ppm solution for a 20-minute exposure time.

ANTIMICROBIAL TREATMENT FOR POULTRY DRINKING WATER. This product may be used at up to 5 ppm to control microorganisms in drinking water intended for poultry. Dilute to 5 ppm or use directly in system with automatic, on-demand injection system metered to produce an end concentration of 5 ppm. Note: application specifics may vary subject to metering system, frequency of replenishment, and the overall capacity of drinking container.

ANTIMICROBIAL APPLICATIONS FOR NON-POTABLE WATER SYSTEMS IN HORTICULTURAL SETTINGS: This product may be used to control and reduce microbial populations in non-potable water used with cut flowers in order to minimize microbial transfer from water to flower in order to maintain/maximize the freshness of cut flowers and to extend their shelf life. Dilute to 5 ppm as table above specifies.

GENERAL CLEANING AND ANTIMICROBIAL USES: NON-POTABLE WATER APPLICATIONS SUCH AS RECIRCULATING WATER SYSTEMS, TO INCLUDE PAPER MILLS, DECORATIVE FOUNTAINS AND COOLING TOWERS: This product will help control, inhibit or remove algae, fungi, slime, or other organic buildups in recirculating water systems. For initial or remedial treatment in cases of significant build-ups of this organic material, begin with a 500 ppm solution for each 1,000 gallons or cooling or fountain water capacity. Then add 10 gallons of the 500 ppm solution to achieve a residual concentration of chlorine dioxide of approximately 5 ppm. Circulate the treated fluid in normal system operation. Repeat daily until desired results are achieved. For continuous or periodic treatment, begin with a 500 ppm solution for each 1,000 gallons of cooling or fountain water, adding one gallon of the 500 ppm solution to achieve a residual concentration of chlorine dioxide of approximately 0.5 ppm. Circulate water in normal system operation.

STORAGE AND DISPOSAL

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

Pesticide Storage: STORE IN DARK, DRY, PROTECTED, WELL-VENTILATED AREA, AWAY FROM DIRECT SUNLIGHT AND WHERE TEMPERATURE WILL NOT EXCEED 122°F (50°C). KEEP AWAY FROM ALL FOOD FOR HUMAN OR ANIMAL CONSUMPTION. MAKE SURE PRODUCT CANNOT COME INTO CONTACT WITH WATER OR ACID OR ACID-BASED PRODUCTS.

Pesticide Disposal: DO NOT DISPOSE OF WITH FOOD OR WATER. IN THE EVENT OF A SPILL, TAKE STEPS TO AVOID RUNOFF TO COME INTO CONTACT WITH COMBUSTIBLE MATERIALS, ACIDIC SOLUTIONS, SKIN OR CLOTHING.

Container Handling: WASTE MATERIALS MUST BE TREATED AS TOXIC AND MUST BE DISPOSED OF IN ACCORD WITH FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT EPA, STATE OR LOCAL ENVIRONMENTAL AGENCIES FOR CURRENT DISPOSAL INSTRUCTIONS. PRIOR TO DISPOSING OF POUCH, MAKE SURE IT IS COMPLETELY EMPTY BEFORE DISPOSING VIA INCINERATION OR IN SANITARY LANDFILL.

WARRANTY STATEMENT: Manufacturer's liability is limited to the purchase price of the product. Manufacturer makes no warranties, implied or expressed, other than that the product shall be free from defects in material and workmanship. The manufacturer makes no warranty to the merchantability of the product. Manufacturer accepts no liability resulting from misuse of product or for any incidental or consequential damages for any breach of warranty.