

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Antimicrobials Division (7510P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

002/1	2		

Date of Issuance:

88341-2

EPA Reg. Number:

2/4/2015

Term of Issuance:	
Conditional	
Name of Pesticide Produ	ct:
PureCide® 25	

Name and Address of Registrant (include ZIP Code):

Sherri Gray Environmental Consulting, Inc. Authorized Representative of T.A. Comb, LLC 15616 Plain Dealing Place Manassas, VA 20112

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

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 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 is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
Demson Fuller, Product Manager 32 Regulatory Management Branch II, Antimicrobials Division (7510P)	2/4/2015

- 2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. Accelerated storage stability and corrosion characteristics study can be used, at the registrant's discretion, to fulfill these data requirements. You have 18 months from the date of registration to provide these data.
- 3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 88341-2."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 01/26/2015

If you have any questions, please contact Srinivas Gowda at (703) 308-6354 or gowda.srinivas@epa.gov.

Sincerely yours,

Demson Fuller, Product Manager 32 Regulatory management Branch II Antimicrobials Division (7510P)

Enclosure: Stamped Label

PureCide® 25

ACCEPTED

02/04/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 88341-2

ACTIVE INGREDIENT:	
SODIUM CHLORITE	25.00%
INERT INGREDIENTS	75.00%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

iter for 15-20
minutes, then
minutes, then
advice.
20 minutes.
advice if
1.
for treatment
oison control
y distress.
a physician
. ,
e then give
ossible.
eatment advice.

For emergency information call: 800-424-9300 (24 hours)

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

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate for the use of gastric lavage.

T.A. COMB, LLC

48 South Mill Street

Hopkington, MA 01748

Lot#

Net Contents

Gallons

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed. Irritating to nose and throat. May be harmful if inhaled. Do not get in eyes, on skin or on clothing. Wear protective eyewear (splash proof goggles). Wear protective clothing and rubber gloves when handling this product. Avoid breathing mists or fumes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing, and going to the toilet. Remove and wash contaminated clothing to avoid fire.

ENVIRONMENTAL HAZARDS

This product 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 the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS

Dry sodium chlorite is a strong oxidizing agent. This product is incompatible with strong acids, oxidizing agents, and reducing agents. This product becomes a fire or explosive hazard if allowed to dry. Mix only into water. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases (chlorine dioxide a poisonous, explosive gas), and possible fire and explosion. Do not contaminate with garbage, dirt, organic matter, household products, chemicals, soap products, paint products, solvents, acids, vinegar, beverages, oils, pine oil, dirty rags, or any other foreign matter. Do not use moist or damp utensils.

DIRECTIONS FOR USE

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

User is responsible for compliance with applicable Federal, state and local laws regarding proper use and disposal of the chlorine dioxide generated.

DIRECTIONS FOR CONTROLLING THE GROWTH OF ALGAE IN RECIRCULATING COOLING WATER TOWERS

- 1. Clean badly fouled systems before starting treatment.
- 2. When algae are visible, add an initial dosage of 6.6 fluid ounces of PureCide® 25 per 1,000 gals. of water in the system. Repeat if necessary until control is evident.
- 3. Where algae control is evident, use a subsequent dose of 3.2 fluid ounces of PureCide® 25 solution per 1,000 gals. of water in the system twice a week or as needed to maintain control.
- 4. Add Sodium Chlorite directly to the cooling tower drip pan (cold water basin) near the inlet to the recirculating pump.

Directions for Use in the Mechanical or Electrolytic Generation of Chlorine Dioxide as a Disinfectant, or for Microorganism or Mollusk Control, and as a Chemical Oxidant in Aquatic Systems

Feed requirements: Feed rates of PureCide® 25 will depend on the severity of contamination and the degree of control desired. The exact dosage will depend on the size of the system and residual necessary for effective control. Depending on the generator type, PureCide® 25 may be diluted at the point of use to prepare a lower % active aqueous solution for use in chlorine dioxide generators.

Some examples of industrial applications of chlorine dioxide include:

- Potable water disinfection and removal of sulfide
- Control of bacterial slime and algae and mollusks in industrial recirculating and one-pass cooling systems
- Biocontrol in food processing flumes, water-using equipment, cooling water, and recycled waters.
- Disinfection of sewage and plant wastes.
- Destruction of phenolics, simple cyanides and sulfides by chemical oxidation.
- Bacterial slime control in white water paper mill systems.
- Bacterial control in oil well and petroleum systems.

Method of feed: Large amounts of chlorine dioxide can be generated by several common methods, including:

- 1. The chlorine method which utilizes a Sodium Chlorite solution and chlorine gas, or
- 2. The hypochlorite method which utilizes a Sodium Chlorite solution, a hypochlorite solution, and an acid.

Your T.A. Comb, LLC representative can guide you in the selection, installation and operation for feed systems.

Potable Water Treatment

The selected generator should be equipped with a sensor that detects the concentration of ClO₂ that is produced. In addition, the generator should be periodically calibrated according to the manufacturer's instructions and/or by using standard chlorine dioxide,

quantitated by iodometric titration. Read the instructions on the chlorine dioxide generation system before using this product.

Chlorine dioxide (CIO₂) is used as both an oxidant and a disinfectant in drinking water treatment. For most municipal and public potable water systems, a chlorine dioxide residual concentration of 2 ppm (106.6 ounces of product per 1000 gallons of water) is sufficient to provide adequate disinfection. Residual disinfectant byproducts must be monitored as required by the National Primary Drinking Water Regulations (40 CFR Part 141) and state drinking water standards.

Industrial Cooling Water Treatment

For control of bacterial slime and algae in industrial recirculating and one-pass cooling systems, the required dosages will vary depending on the exact application and the degree of contamination present. The required chlorine dioxide residual concentrations range between 0.1 and 5.0 ppm (5.0-24.8 ounces of product per 1000 gallons of water). Chlorine dioxide may be applied either continuously or intermittently. The typical chlorine dioxide residual concentration range is 0.1 - 1.0 ppm for continuous doses, and 0.1 - 5.0 ppm for intermittent doses. The minimum acceptable residual concentration of chlorine dioxide is 0.1 ppm for a minimum one minute contact time.

Mollusk Control in Water Systems

Chlorine dioxide generated from sodium chlorite may be used for mollusk control in commercial and industrial recirculating and one-pass cooling water systems. Add 2.0 gallons of product per 1000 gallons of water to be treated. The required dosages will vary with the system type, system conditions, the degree of water contamination present and the desired level of control. Depending on the extent of the infestation, sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to achieve the necessary chlorine dioxide residual concentration.

<u>Veliger Control</u>: Maintain a continuous chlorine dioxide residual of 0.1 - 0.5 ppm (5.0 - 24.8 ounces of product per 1000 gallons of water to be treated.)

<u>Intermittent Dose</u>: Apply chlorine dioxide to obtain a chlorine dioxide residual concentration of 0.2 - 25 ppm (12.4 ounces of product per 1000 gallons of water to be treated. Repeat as necessary to maintain control.

<u>Continuous Dose</u>: Maintain a chlorine dioxide residual concentration of up to 2 ppm (106.6 ounces of product per 1000 gallons of water)

Food Plant Process Water Treatment

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in flume water and other food processing water systems such as chill water systems, cheese brine and hydro coolers. The required dosages will vary with process conditions and the degree of contamination present. Depending on the requirements of the specific water system, sodium chlorite should be applied

continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.25 and 5.0 ppm (12.4-253.0 gallons of product per 1000 gallons of water to be treated.

Water containing up to 3 ppm residual chlorine dioxide may be used for washing fruits and vegetables that are not raw agricultural commodities in accordance with 21CFR§173.300. Treatment of the fruits and vegetables with chlorine dioxide must be followed by a potable water rinse, or by blanching, cooking or canning.

Chlorine dioxide (ClO₂) gas may be used for fumigating fruits and vegetables that are not raw agricultural commodities in accordance with 21CFR§173.300. Treatment of the fruits and vegetables with chlorine dioxide in a closed chamber system must be followed by a potable water rinse, or by blanching, cooking or canning.

Wastewater Treatment

Chlorine dioxide (CIO₂) is effective as both a disinfectant and an oxidant in wastewater treatment. The required dosages will vary with water conditions and the degree of contamination present. For most municipal and other wastewater systems, a chlorine dioxide residual concentration of up to 5 ppm (2.0 gallons of product per 1000 gallons to be treated) is sufficient to provide adequate disinfection.

For sulfide odor control, between pH 5-9, a minimum of 5.2 ppm (wt) of chlorine dioxide should be applied to oxidize 1 ppm of sulfide (measured as sulfide ion). For phenol destruction, at pH less than 8, 1.5 ppm chlorine dioxide will oxidize 1 ppm phenol; at pH greater than 10, 3.3 ppm chlorine dioxide will oxidize 1 ppm phenol.

Bacterial Slime Control in Paper Mills

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in white water paper mill systems. The required dosages will vary with the degree of microbiological and process contamination present. Depending on the specific requirements of the system, sodium chlorite should be applied continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.1 and 5.0 ppm (5.0-253.0 ounces of product per 1000 gallons of water to be treated. Intermittent treatments should be repeated as often as necessary to maintain control.

Directions for Use in Controlling Microbial Population in Poultry Processing Water

Chlorine dioxide generated from this product may be used as an antimicrobial agent in water used in poultry processing, provided that the residual concentration of chlorine dioxide does not exceed 3 ppm, as determined by an appropriate method in accordance with 21CFR§173.300.

For treatment of poultry chill water, apply this product as necessary through a chlorine dioxide generation system to maintain a residual concentration of up to 3 parts per

million (ppm) or 158.7 ounces of product per 1000 gallons of chiller water.

Bacterial Control in Oil Wells And Petroleum Systems

Chlorine dioxide is effective in the remediation of bacterial and sulfide contamination commonly found in oilfield production, injection and disposal fluids. The required dosages will vary with process conditions. Sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to oil well production water as it is separated from the oil, and before it is re-injected into the well.

For continuous feeds, chlorine dioxide may be applied at dosages slightly higher than sulfide's oxidative demand as determined by a demand study. For intermittent treatment, chlorine dioxide should be applied at a shock dosage of 200-3000 ppm.

STORAGE AND DISPOSAL

PESTICIDE STORAGE: Do not contaminate water, food or feed by storage or disposal. Keep product in tightly closed container when not in use. Don't drop, roll or skid drum. Keep upright. Always replace cover. Store in a cool, dry, well-ventilated area away from heat or open flame.

EMERGENCY HANDLING: In case of contamination or decomposition, do not reseal container. If possible, isolate container in open and well-ventilated area. Flood with large volumes of water. If fire occurs, extinguish fire by applying large quantities of water. Any unopened drums near the fire should be cooled by spraying with water.

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 quidance.

CONTAINER HANDLING:

For non-refillable solid containers smaller than 50 lbs.

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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. Turn the container over onto its other end and tip it back and forth several times. Empty the 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.

For non-refillable solid containers that are larger than 50lbs.

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple Rinse container promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment 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 the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat the procedure two more times.

For refillable containers, all sizes.

Refillable container. Refill this container with PureCide® 25 only. Do not reuse this container for any other purpose. Cleaning or pressure rinsing the container 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 a mix tank. Fill the container about 10% full of water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

WARRANTY

T.A. Comb, LLC warrants that this product complies with the specifications expressed on the label. To the extent consistent with applicable law, **T.A. Comb, LLC** makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose.