

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 24, 2016

Ms. Sherri Gray Agent For: T. A. Comb, LLC Sherri Gray Environmental Consulting 15616 Plain Dealing Place Manassas, VA 20112

Subject: Notification per PRN 98-10 – Add "Not for use in California"

Product Name: PureMax

EPA Registration Number: 88341-3 Application Date: March 10, 2016

Decision Number: 516532

Dear Ms. Gray:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

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.

Page 2 of 2 EPA Reg. No. 88341-3 Decision No. 516532

If you have any questions, you may contact Killian Swift at 703-308-6346 or via email at <a href="mailto:Swift.Killian@epa.gov">Swift.Killian@epa.gov</a>.

Sincerely,

Demson Fuller, Product Manager 32 Regulatory Management Branch II Antimicrobials Division (7510P) Office of Pesticide Programs

### **PureMax**

A Precursor Chemical Solution for Use Only in a Chlorine Dioxide Generator

ACTIVE INGREDIENT:	
SODIUM CHLORATE (NaClO <sub>3</sub> )	40.0%
OTHER INGREDIENTS	
ΤΟΤΔΙ	100.0%

#### FOR INDUSTIRAL USE

#### **KEEP OUT OF REACH OF CHILDREN**

### DANGER/PELIGRO

"Si usted no entiende la etiqueta, busgue a alguien para que sa la explique a used en detalle. (If you do not understand the label, find someone to explain it to you in detail.)"

FIRST AID	
IF IN EYES	■ Hold eye open and flush with a directed stream of water for 15 – 20
	minutes.
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then</li> </ul>
	continue rinsing eyes.
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR	<ul> <li>Take off contaminated clothing.</li> </ul>
CLOTHING	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
IF INHALED	<ul><li>Move person to fresh air.</li></ul>
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial</li> </ul>
	respiration, preferably mouth-to-mouth if possible.
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person Sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or</li> </ul>
	doctor.
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF INHALED  IF SWALLOWED	<ul> <li>Call a poison control center or doctor for treatment advice.</li> <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 immediately for treatment advice.</li> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> <li>Call a 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 a poison control center or doctor.</li> </ul>

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 for treatment.

#### **NOTE TO PHYSICIAN**

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

T.A. Comb, LLC 1241 N. Ellis Street Bensenville, IL 60106 EPA Reg. No. 88341-3 EPA Est. No.

Net Contents:

#### NOTIFICATION

88341-3

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

# PRECAUTIONARY STATEMENTS DANGER HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Harmful if absorbed through the skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or faceshield. When contact is likely wear PVC or rubber rainsuit and wash down rainsuit after each use. Wear protective gloves, plastic or rubber. Wear plastic or rubber safety toed boots. Leather and cloth impregnated with sodium chlorate are highly flammable and easily ignited with minor friction. Remove and wash contaminated clothing before re-use. Do not allow contaminated clothing to dry before washing clothing on-site. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### **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 discharge. Do not discharge effluent containing this product into 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 OR CHEMICAL HAZARDS

PureMax is a strong oxidizing agent. Do not contaminate with dirt, oils or organic matter of any sort. Contamination may cause violent chemical reactions, fire and explosion. Clean up all chemical spills immediately. Allowing spills to dry or concentrate may cause spontaneous combustion. In case of chemical spills, avoid bodily contact and wear appropriate protective equipment.

#### **USER SAFTEY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Change clothing when contaminated and wash on-site. Do not allow contaminated clothing to dry before washing clothing on-site.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

User must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User must remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Do not allow contaminated clothing to dry before washing clothing on-site.

User must remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

#### **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.

Only for formulation as an antimicrobial for the following uses:

PureMax is for use only in a chlorine dioxide generator, a pesticide device installed to generate chlorine dioxide for the registered uses listed below. Feed rates for PureMax are determined by the operator to achieve the desired production rate for chlorine dioxide. As described below, the appropriate production rate will depend on the severity of contamination, the degree of control desired, the size of the system and residual necessary for effective control. For all uses, the point of feed of chlorine dioxide must be below the water level to prevent volatilization of the chlorine dioxide. Chlorine dioxide must be added to the water stream at a point where adequate mixing and uniform distribution can occur.

#### INDUSTRIAL PROCESS WATER USES

This product is approved for the control of microbial, algal and mollusk populations in industrial process or waste water at the sites listed below. The dosage of chlorine dioxide required is dependent on the specific use; see specific directions below. PureMax may be used to treat the following aquatic sites:

#### RECIRCULATING COOLING WATER TOWERS

To control microbial and algal slime in recirculating cooling water systems, an intermittent or continuous application may be used. If using continuous feed, maintain residual chlorine dioxide concentrations between 0.1-1.0 ppm. If using intermittent feed, maintain a residual concentration of 0.1-5.0 ppm. Chlorine dioxide must be added to drip pan, cold water well, or other points where adequate mixing and uniform distribution can occur.

#### **ONCE THROUGH COOLING WATER TOWERS**

To remove adult mollusks in once through cooling water systems, an intermittent dose of 0.2-25 ppm is necessary; the exact dose is dependent on the infestation present. If a continuous dose is preferred, apply chlorine dioxide at rates that maintain 0.25-2 ppm in the cooling water. To prevent settling and attachment of the free swimming larvae or mollusks (velligers), apply a continuous feed to achieve a residual of 0.1-0.5 ppm.

Chlorine dioxide must be added to drip pan, cold water well, or other points where adequate mixing and uniform distribution can occur.

#### TEXTILE PROCESSING WATER AND PULP AND PAPER PROCESS WATER

To control microorganisms that form slime in paper process water and that cause blockages of paper mill equipment, and to oxidize slime buildup already present, chlorine dioxide may be applied in an intermittent or continuous dose. Either method of application must maintain a residual concentration of 0.1- 5.0 ppm of chlorine dioxide in the paper process water. If the system is badly fouled, it must be cleaned prior to treatment with chlorine dioxide. This product can be used as a slimicide for process water used in the manufacture of food-contact paper and paperboard.

#### PASTEURIZER, CANNERY AND RETORT WATER SYSTEMS

To control odor and reduce bacterial slime in cooling and warming waters such as canning, retort, and pasteurizer process water, chlorine dioxide may be added intermittently to achieve a dose of 0.4 ppm.

## IMPOUNDED LAKE, POND AND RESERVOIR WATER, INCLUDING INDUSTRIAL WASTE WATER

To control microorganisms and algae that cause unacceptable odors and slime, these aquatic sites may be treated with chlorine dioxide on an intermittent basis. Sufficient chlorine dioxide must be added to reach a residual concentration of 5 ppm, in order to achieve adequate control of odor and slime caused by algae and microorganisms.

#### SEWAGE AND WASTEWATER SYSTEMS

For (disinfection/sanitization) of sewage and wastewater, add chlorine dioxide to achieve a residual of up to 5 ppm. To control odors caused by sulfides associated with sewage and wastewater, a minimum of 5.2 ppm chlorine dioxide must be applied to oxidize 1 ppm sulfide (measured as sulfide ion) if the pH is between 5-9. A minimum of 1.5 ppm chlorine dioxide will oxidize 1 ppm phenol if the pH is less than 8; if the pH is greater than 10, a minimum of 3.5 ppm chorine dioxide is required.

# GAS AND OIL RECOVERY INJECTION WATER; FRACTURING SYSTEM FLUIDS Not for use in California

To control sulfate reducing bacteria that form colloidal sulfur or iron sulfides, and to oxidize sulfides, a continuous or intermittent application of chlorine dioxide may be used. If using a continuous feed of chlorine dioxide, apply it at rates slightly higher than the sulfide oxidative demand, as determined by a sulfide demand study. If using an intermittent feed, apply a shock dose of 200-3000 ppm chlorine dioxide. Please be certain that this product is not discharged into lakes, streams, ponds, oceans or other waters.

### ULTRASONIC TANK WATER; PHOTO PROCESSING WASH WATER; AND LEATHER PROCESSING SOLUTIONS

#### Not for use in California

To control slime caused by microbial populations in these liquid systems, a residual chlorine dioxide concentration between 0.25 to 5.0 ppm is necessary. Chlorine dioxide may be added intermittently, or on a continuous basis to achieve the desired residual; the concentration maintained is dependent on individual systems.

#### **Potable Water Treatment**

The selected generator should be equipped with a sensor that detects the concentration of CIO2 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 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.

### This product also may be used to generate chlorine dioxide for non-pesticidal uses such as:

Oxidizing nutrients Reducing sludge

Eliminating odors Clarifying/precipitating organic and inorganic particles

Controlling scale & deposits Reducing TOC (Total Organic Carbon)

Controlling iron & manganese Reducing color

Controlling corrosion

Destruction of odors caused by phenolics simple cyanides and sulfides by chemical

oxidation

Storage and Disposal Statement for non-refillable containers

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in the original container. Store at ambient temperatures from 40°F to 100°F. Store separately from sulfuric acid precursor and all other acids. Store in fire-resistant area separate from incompatible materials such as acids, powdered metals, organic chemicals, combustible materials and dirt. Clean up spills immediately.

**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 the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING**

Non-refillable Container. Do not reuse or refill this container. Clean container 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. Alternatively, pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning. If recycling is unavailable, puncture and dispose of container in a sanitary landfill, or by incineration.

Storage and Disposal Statement for refillable containers

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store separately from sulfuric acid precursor and all other acids. Store in fire-resistant area separate from incompatible materials such as acids, powdered metals, organic chemicals, combustible materials and dirt. Clean up spills immediately.

**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 the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING**

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 rinsate collection system. Repeat this rinsing procedure 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.