

49620-4

09-29-2010

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Antimicrobials Division (7510P)
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Reg. Number:
49620-4

Date of Issuance:
SEP 29 2010

Term of Issuance:
Conditional

Name of Pesticide Product:
Purate

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Eka Chemicals, Inc
1775 West Oak Commons Court
Marietta, GA 30062

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration 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/ reregistered 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.

Based on your response to the Sodium chlorate RED, the EPA has reregistered this product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g) (2) of the Federal Insecticide, Fungicide and Rodenticide Acts, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. The EPA may require submission of data at any time to maintain the registration of the subject product.

Make the following label changes:

1. Revise the "Industrial Use Only" claim on page 1 by deleting the term, "Only."
2. According to the Label Review Manual, the Ingredient Statement must be placed immediately below the product name.

Signature of Approving Official:

Wanda Henson
(Acting) Product Manager Team-32
Regulatory Management Branch II
Antimicrobials Division (7510P)

Date:

SEP 29 2010

3. According to 40 CFR 156.206(e), the statement, "*Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)*," must appear on the label following the Spanish signal word. Revise your label accordingly.
4. Revise the "Precautionary Statements" to read:

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, long sleeved shirt, long pants, socks, shoes, and neoprene 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.

5. According to the Sodium chlorate RED, the following statements must be added to the label after the "Precautionary Statements":

User Safety 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.

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.

Users must remove PPE immediately after handling the product. As soon as possible, wash thoroughly and change in to clean clothing.

6. Revise the "Environmental Hazard" statements by adding the statement, "*This product is toxic to fish and aquatic organisms.*"
7. The "Directions for Use" on page 2 must be revised to be in compliance with PR Notice 2000-5, Mandatory Labeling, by deleting the term, "should," and stating "*must.*"

CONCURRENCES

SYMBOL							
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- 8. Separate headings and associated directions must be created for the "Recirculating and Non-recirculating cooling water Towers" use sites. Revise the "Directions for Use" to state:

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, and intermittent dose of 0.2-25 ppm 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 of mollusks (velligers), apply a continuous feed to achieve a residual of 0.1-0.5ppm. Chlorine dioxide must be added to drip pan, cold water well, or other points where adequate mixing and uniform distribution can occur.

- 9. Revise the 1st statement under "Pesticide Disposal" to read "Pesticide wastes are acutely hazardous."

Submit two (2) copies of your final printed label before distributing or selling the product bearing the labeling revisions. A stamped copy of the label is enclosed for your records.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6 (e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have questions concerning this matter, please contact me at (703) 308-6345 or by email at Henson.wanda@epa.gov.

Sincerely,

Wanda Henson
(Acting) Product Manager 32
Antimicrobials Management Branch II
Antimicrobials Division (7510P)

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ACCEPTED
with COMMENTS
in EPA Letter Dated:

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SEP 29 2010

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 49620-4

Purate®

A Precursor Chemical Solution for Use Only in the SVP-Pure® Chlorine Dioxide Generator

This chemical solution is for the use only in the SVP-Pure® Chlorine Dioxide Generator, a pesticide device that produces CHLORINE DIOXIDE absorbed into water. In addition to this precursor, the SVP-Pure® Chlorine Dioxide Generator usually requires a feedstock of 78% sulfuric acid. Please refer to the SVP-Pure® Maintenance and Operations Manual to ensure proper activation.

**-FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
DANGER/PELIGRO**

FIRST AID	
IF IN EYES	Hold eye open and flush with a directed stream of water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. 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 immediately for treatment advice.
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF INHALED	Move person 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 further treatment.
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 the use of gastric lavage	
In case of exposure emergency, call Eka Chemicals at (800) 227-5301	

ACTIVE INGREDIENT:	
Sodium Chlorate (NaClO3)	40.0%
OTHER INGREDIENTS:	60.0%
TOTAL	100.00

-FOR INDUSTRIAL USE ONLY- • KEEP OUT OF REACH OF CHILDREN

EKA CHEMICALS, INC. 1775 West Oak Commons Court Marietta, GA 30062-2254 (770) 578-0858	EPA Reg. No. 49620-4 EPA Est. No. 49620-MS-1 _____ EPA Est. No. 48520-CT-1 _____ EPA Est. No. 62215-CO-1 _____ EPA Est. No. 70625-TX-1 _____
Net Contents _____	Gallons _____

PRECAUTIONARY STATEMENTS • HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER/PELIGRO

Purate® is corrosive. Causes irreversible eye damage. Causes skin burns. Do not get in eyes or skin or clothing. Wear protective eyewear (goggles or face shield). Wear protective clothing and neoprene gloves. Wash thoroughly with soap and water after handling. May be fatal if inhaled. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

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.

CHEMICAL HAZARDS

Purate® 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.

DIRECTIONS FOR USE

General Directions:

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Only for formulation as an antimicrobial for the following uses:

Purate® is for use only in the SVP-Pure® Chlorine Dioxide Generator, a pesticide device installed to generate chlorine dioxide for the registered uses listed below. Feed rates for Purate® 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 should be below the water

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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.

Drinking Water Treatment

This product is approved for use in water treatment facilities that produce potable drinking water in compliance with the Safe Drinking Water Act. A typical dosage of chlorine dioxide for water systems is between 0.5 and 5 ppm on a continuous basis. *Purate* has been approved by the National Sanitation Foundation for use in drinking water systems.

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. *Purate* may be used to treat the following aquatic sites:

Recirculating and non-recirculating cooling water:

To control microbial and algal slime in cooling water systems, an intermittent or continuous application may be used. If using a 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. In recirculating systems, chlorine dioxide should be added to the drip pan, cold water well, or other points where adequate mixing and uniform distribution can occur. 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 of mollusks (veligers), apply a continuous feed to achieve a residual of 0.1 - 0.5 ppm.

Fuel and industrial ethanol fermenters:

To prevent or reduce bacterial contamination and to prevent and control the formation of by products of bacterial contamination. Chlorine dioxide should be added by batch method to achieve an initial dose in the fermenter of 0.1 ppm to 5.0 ppm. Repeat weekly or as signs of bacterial contamination appear. The exact dose of chlorine dioxide will need to be adjusted for levels of contamination, pH and type of contamination.

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 should 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 slimeicide 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 chlorine dioxide is required.

Gas and oil recovery injection water; fracturing system fluids:

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

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.

Agricultural Water Uses (Non-Food Contact):

Purate is approved for use in the control of microbial populations in water for the following agricultural non-food contact uses: Drinking water treatment for animals not meant for human consumption (e.g., show and research animals, animals raised for fur to wool; horses, mules or donkeys). Treatment of drinking water tanks for livestock not meant for human consumption can be achieved by intermittent or continuous application of chlorine dioxide. Either method should be monitored, to achieve a residual concentration between 1.0 - 2.0 ppm chlorine dioxide.

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

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.

DISPOSAL OF WASTES
Pesticide wastes are toxic. 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
Nonrefillable container. Do not reuse or refill this container
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, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Storage and Disposal Statement for shipments made in transport vehicles (bulk shipments)

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry and fireproof area away from heat sources including friction and impact. Store separate from all other materials, including organic substances, strong acids, phosphorous, sulfur, sulfides, powdered metals, ammonium salts, arsenic, copper, zinc, aluminum, manganese dioxide, potassium cyanide, thiocyanates, expanded plastics such as polystyrene and polyurethane.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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: Refer to vendor for transport vehicle cleaning requirements.

WARRANTY

EKA CHEMICALS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on such label when used in the *SVP-Pure Chlorine Dioxide Generator*.

Rev. 7- 1/29/2007