

49620-4

12/17/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



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

December 17, 2007

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Matt Talley  
Agent for EKA Chemicals  
c/o Keller and Heckman LLP  
1001 G Street NW, Suite 500 West  
Washington, D.C. 20001

Subject: Purate  
EPA Registration No. 49620-4  
Application Date: November 21, 2007  
Receipt Date: November 21, 2007

Dear Mr. Talley:

This acknowledges receipt of your notification, submitted under the provision of PR Notice 98-10, FIFRA section 3(c)9.

**Proposed Notification**

- Addition of new site "Fuel and Industrial Ethanol Fermenters" and subsequent Directions for Use.

**General Comments**

Based on a review of the material submitted, the following comments apply:

The notification application is acceptable and a copy has been inserted in your file for future reference.

Should you have any questions or comments concerning this letter, please contact me at (703) 308-6345.

Sincerely,

Wanda Y. Henson  
Product Reviewer (32)  
Regulatory Management Branch II  
Antimicrobials Division (7510P)

CONCURRENCES							
MBOL	7510P	7510P					
RNAME	E. Berg	Henson					
TE	12/17/07	12/17/07					

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95



United States  
Environmental Protection Agency  
Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number

**Application for Pesticide - Section I**

1. Company/Product Number Eka Chemicals, Inc./ 49620-4	2. EPA Product Manager Emily Mitchell	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) <i>Eka Chemical Company/ Purate</i>	PM# 32	
5. Name and Address of Applicant (Include ZIP Code) EKA Chemicals, Inc. 1775 West Oak Commons Court Marietta, GA 30062-2254  <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____ Product Name _____	

**Section II**

<input type="checkbox"/> Amendment - Explain Below	<input type="checkbox"/> Final printed labels in response to Agency Letter dated _____
<input type="checkbox"/> Resubmission in response to Agency Letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Notification to add new use and directions.  
PRIA Fee Category: Not applicable. Notification per PR Notice 98-10  
Please forward correspondence to: Matt Talley, Keller and Heckman LLP 1001 G Street NW Suite 500, Washington DC 20001. tele: 202-434-4230 email: talley@khlaw.com

**Section III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal	
	If "yes," Unit Package wgt.	No. per container	If "Yes," Package wgt.	<input type="checkbox"/> Glass	
			No. per container	<input type="checkbox"/> Paper	
* Certification must be submitted.				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container 30 and 55 gallon and bulk containers		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product			<input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		
			<input type="checkbox"/> Other (_____)		

**Section IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Matt Talley	Title Registration Agent for Eka Chemicals	Telephone No. (Include Area Code) 202-434-4230
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false for misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Registration Agent for Eka Chemicals	
4. Typed Name Matt Talley	5. Date 11-21-2007	

1001 G Street, N.W.  
Suite 500 West  
Washington, D.C. 20001  
tel. 202.434.4100  
fax 202.434.4646

Writer's Direct Access  
**Matthew E. Talley**  
(202) 434-4230  
talley@khlaw.com

November 21, 2007

**Via Courier**

Ms. Emily Mitchell  
Product Manager 32, Antimicrobial Division  
U.S. Environmental Protection Agency  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Re: Notification to add Use to *Purate*®; EPA Registration No. 49620-4

Dear Ms. Mitchell:

On behalf of our client, Eka Chemicals, Inc. (Eka), we are submitting a notification for Purate® (EPA Reg. No. 49620-4). The following new use is: "Fuel and Industrial Ethanol Fermenters". The new directions for use are as follows:

"To prevent or reduce bacterial contamination and to prevent or control the formation of by-products of bacterial contamination. Chlorine dioxide should be added by batch method or continuous method to achieve an initial dose in the fermentation process equipment of 0.1 ppm to 5.0 ppm. Adjust or repeat application as appropriate for the control of bacterial contamination. The exact frequency and dose of chlorine dioxide depends on the level of contamination, pH, temperature, type of contamination and other factors."

Per Pesticide Registration (PR) notice 98-10, new use sites may be added to antimicrobial product labels via notification provided that six requirements are met. In this case:

1. No additional data are required for the added site and use;
2. The proposed use site use is within an already registered use pattern category (indoor, nonfood, closed industrial processing);

KELLER AND HECKMAN LLP

Ms. Emily Mitchell  
November 21, 2007  
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- 3. Exposure is not increased;
- 4. We are not aware of any Agency decision or directive prohibiting the addition;
- 5. *Purate*® is a Manufacturing Use Product and its' label does not prohibit the end use product, chlorine dioxide, from being used in the use pattern; and
- 6. The dosage, concentration, frequency or method of application recommendations are the same for this use as for similar uses.

This use was recently added via notification to the label of Anthium Dioxide (EPA Reg. No. 9150-2). This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR§152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. We understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. We further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and the registrant may be subject to enforcement action and penalties under section 12 and 14 of FIFRA.

Five copies of the proposed label are attached. One copy has the added language in yellow highlight and four 'clean' copies have the new language incorporated into the existing *Purate*® label. As this is a submission under PR Notice 98-10, it is not subject to a PRIA fee or review schedule.

We trust that this notification is complete. If you have any questions, please contact me at 202-434-4230.

Sincerely,



Matthew E. Talley  
Pesticide Regulatory Specialist

cc: [illegible]

# 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	
<b>IF IN EYES</b>	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.
<b>IF ON SKIN OR CLOTHING</b>	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.
<b>IF SWALLOWED</b>	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.
<b>IF INHALED</b>	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**

<b>EKA CHEMICALS, INC.</b> 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

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 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.

*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

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 or control the formation of by-products of bacterial contamination. Chlorine dioxide should be added by batch method or continuous method to achieve an initial dose in the fermentation process equipment of 0.1 ppm to 5.0 ppm. Adjust or repeat application as appropriate for the control of bacterial contamination. The exact frequency and dose of chlorine dioxide depends on the level of contamination, pH, temperature, type of contamination and other factors.

**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 does. 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 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 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.

<b>This product also may be used to generate chlorine dioxide for non-pesticidal uses such as:</b>	
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

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**STORAGE AND DISPOSAL**

**STORAGE**

Unless delivered in bulk, 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 DISPOSAL**

Triple rinse (or equivalent). 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.

**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*.

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