

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

December 6, 2004

Steven C. Beers
President
ICA Trinova, LLC
277 Southfield Parkway
Forest Park, GA 30277.

Subject: Sodium Chlorite- Precursor for Chlorine Dioxide Solution Pack
EPA Registration No. 79814-3
Application Date: October 28, 2004
Receipt Date: November 8, 2004

Dear Mr. Beers:

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

Proposed Notification

- Changes to "Direction for Use" section

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. Mitchell
Product Reviewer 32
Regulatory Management Branch II
Antimicrobials Division (7510C)

CONCURRENCES

SYMBOL	7510C	7510C						
SURNAME	S. Beers	W. Mitchell						
DATE	12-16/04	12-6-04						

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060, Approval expires 5-31-98



United States
Environmental Protection Agency
Washington, DC 20460

 Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number EPA Establishment No. 79814-GA-001/Product Reg # 79814-3	2. EPA Product Manager Wanda Mitchell	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Sodium Chlorite - Precursor for Chlorine Dioxide Solution Pack	PM # 32	
5. Name and Address of Applicant (Include ZIP Code) ICA TriNova, LLC 277 Southfield Parkway, Ste 135 Forest Park, GA 30277 <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 of change for "Directions for Use" per PR Notice 98-10 (I.M.1.). The only change being made is shown on the attached revised label on pages 2 & 3 and allows for the additional method of generation of Chlorine Dioxide from the Sodium Chlorite precursor using acidification by means other than chlorine or hypo-chlorite.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46. (Continued on page 2)

Section - III

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

Section - IV

1. Contact Person (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Steven C. Beers	Title President	Telephone No. (Include Area Code) 770.883.6410
Certification 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 or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title President	
5. Typed Name Steven C. Beers	5. Date 28 October 2004	

ICA Sodium Chlorite – Precursor for Chlorine Dioxide Solution Pack – Notification of Label Change for “Directions for Use”

Section II - Explanation

(Continued from page one)

and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA, and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA.

Sodium Chlorite - Precursor for Chlorine Dioxide Solution Pack

ACTIVE INGREDIENT: Sodium Chlorite80%
INERT INGREDIENTS.....20%
AVAILABLE CHLORINE.....125%

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID

“Have the Product container or label with you when calling a poison control center or doctor, or going for treatment.” You may also contact: HOTLINE NUMBER 1-800-262-8200 for emergency medical treatment information.

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 immediately for treatment advice.

If on skin Brush off excess chemical

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 burning or irritation of the skin persists

If swallowed: Call a poison control center or doctor immediately for treatment advice

Have a 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: Move person to fresh air and monitor for respiratory distress.

If cough or difficulty in breathing develops, consult a physician immediately.

If a person is not breathing, call 911 or an ambulance, then give artificial respiration.

Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage

ICA TRINOVA

277 Southfield Parkway Suite 135

Forest Park, GA 30297-2527

EPA Reg No. 79814-3

EPA Est. 79814-GA-001

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS**

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 public 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.

Highly Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed. Irritating to nose and throat. Do not get in eyes, on skin or clothing. Wear protective eyewear (goggles or safety glasses). Wear protective clothing and rubber gloves when handling. Avoid breathing dust and fumes. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

CHEMICAL HAZARDS

Danger: strong oxidizing agent. 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 moisture, 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 the product in a manner inconsistent with its labeling.

Directions for Controlling the Growth of Algae in Recirculating Cooling Towers

1. Clean badly fouled systems before starting treatment.
2. When algae are visible, add an initial dosage of 5.3 fl. oz. (3.4 oz by wt.) of Sodium Chlorite per 1000 gals. of water in the system. Repeat if necessary until control is evident.
3. Where algae control is evident, use a subsequent dose of 2.6 fl. oz. (1.7 oz. By wt.) of Sodium Chlorite per 1000 gallons of water in the system twice per 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, Electrolytic, or other Modified Reactor 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 the sodium chlorite 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, Sodium Chlorite Solution is typically diluted at the point of 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.
- Bio-control 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 paper mill systems.
- Bacterial control in oil well and petroleum systems.

Method of feed:

Large amounts of chlorine dioxide can be generated by two 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.

Smaller quantities of chlorine dioxide can also be generated by:

- The acidification method which utilizes Sodium Chlorite and common acids

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

Potable Water Treatment

Chlorine Dioxide (ClO₂) is used as both an oxidant and a disinfectant in drinking water treatment. The required dosages will vary with source water conditions and the degree of contamination present. For most municipal and public potable water systems, a chlorine dioxide residual of up to 2 ppm is sufficient to provide adequate disinfection. Residual disinfectant and disinfection 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. Chlorine dioxide may be applied either continuously or intermittently. The typical chlorine dioxide residual concentration range of 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 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. 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 continuously or intermittently through a chlorine dioxide generating system to achieve the necessary chlorine dioxide residual concentration.

Veliger Control: Maintain a continuous chlorine dioxide residual of 0.1 – 0.5 ppm.

Intermittent Dose: Apply chlorine dioxide to obtain a chlorine dioxide residual concentration of 0.2 – 25 ppm. Repeat as necessary to maintain control.

Continuous Dose: Maintain a chlorine dioxide residual concentration of up to 2 ppm.

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 and hydrocoolers. 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 – 5.0 ppm. 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 21CFRS173.300. Treatment of the fruits and vegetables with chlorine dioxide must be followed by a potable water rinse, or by blanching, cooking or canning.

Wastewater Treatment

Chlorine dioxide (ClO_2) 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 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 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. Intermittent treatments should be repeated as often as necessary to maintain control.

Bacterial Control in Oil Wells and Petroleum Systems

Chlorine Dioxide is effective in the remediation of bacteria 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

STORAGE: Do not contaminate water, food or feed by storage or disposal. Keep product in tightly closed container when not in use. Do not abrade package on or across hard surfaces. 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 containers 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 guidance.

CONTAINER DISPOSAL: Triple rinse container. Then puncture and dispose of in a sanitary landfill, or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY CONDITIONS OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Buyer assumes all risks of use, storage and handling of this material not in strict accordance and directions given herewith. In no case shall ICA TriNova LLC or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when use and/or handling is not in strict

accordance with directions given herewith. The foregoing is a condition of sale by ICA TriNova LLC and is accepted by the buyer.