



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

April 9, 2013

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Steven C. Beers ICA TriNova, LLC 1 Beavers Street, Ste B Newman, GA 30263

Subject:

Sodium Chlorite-Precursor for Chlorine Dioxide Solution Pack

EPA Reg.#: 79814-3

Notification Date: March 13, 2013 Receipt Date: March 25, 2013

Dear Mr. Beers:

This acknowledges the receipt of your notification, submitted under the provision of PR Notice 98-10 and FIFRA section 3(c)(7)(a).

## **Proposed Notification:**

Update the Storage and Disposal Statement per PR Notice 2007-4 for Sodium Chlorite-Precursor for Chlorine Dioxide Solution Pack (EPA Reg.#: 79814-3). The initial submitted label dated 03/13/2013 (pin punch 03/25/13) was updated on 04/02/2013 (pin punch 04/02/13).

#### **General Comment:**

Based on the review of the material submitted, the notification application to update the "Storage and Disposal" statement is **acceptable**.

This notification and a copy of this letter have been inserted in your file for future reference.

If you have any questions on this letter, please contact David Liem by email at liem.david@epa.gov or call at 703-305-1284.

Monisha Harris

Product Manager (32)

Regulatory Management Branch II Antimicrobials Division (7510P)

http://www.epa.gov/opprd001/forms/8570-1.pdf

| Please read instructions of   | n reverse before completing  | <u> </u>          |  | Form Approx   | ved. | OMB (                       | 070-0060                       | )                     |      |  |
|---|--|-------------------|--|---|------|-----------------------------|--------------------------------|-----------------------|------|--|
| SEPA Environmental Protection Ager Washington, DC 20460   |  |                   | acy Ame  |   |      | Registra<br>Amenda<br>Other |                                | OPP Identifier Number |      |  |
| Application for Pesticide - Section I   |  |                   |  |   |      |                             |                                |                       |      |  |
| Company/Product Number  EPA Establishment No. 79814-GA-001/Product Reg #79814-3   |  |                   | 2. EPA Product Manager     Wanda Mitchell  |   |      |                             |                                |                       |      |  |
| Company/Product (Name)     Sodium Chlorite - Precursor for Chlorine Dioxide Solutdion Pack  |  |                   | PM# XX None Restricted   |   |      |                             |                                |                       |      |  |
| 5. Name and Address of Applicant (Include ZIP Code) ICA TriNova, LLC 1 Beavers Street, Ste B Newnan, GA 30263   |  |                   | 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. |   |      |                             |                                |                       |      |  |
| Check if this is a new address  |  |                   | Product Name   |   |      |                             |                                |                       |      |  |
|   |  | Sect              | tion - II  |   |      |                             |                                |                       |      |  |
| Amendment - Explain below.  Resubmission in response to Agency letter deted  XX Notification - Explain below.   |  |                   |  | Final printed labels in response to Agency letter dated "Me Too" Application.  Other - Explain below. |      |                             |                                |                       |      |  |
| Explanation: Use additional page(s) if necessary. (For section I and Section II.)  Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notices 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.144, 156.146 and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for 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 the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144 156.146 and 156.156, 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.  Section - III |  |                   |  |   |      |                             |                                |                       |      |  |
| 1. Material This Product V  | Vill Be Packaged In:   |                   |  |   |      | <del></del>                 |                                |                       |      |  |
| Child-Resistant Packaging Yes* No * Certification must  | Int Packaging  Ves  No  If "Yes"  Unit Packaging  Water  W |                   |  | Yes No  |      |                             |                                |                       |      |  |
| 3. Location of Net Contents Information 4. Size(s) Retail Contain   |  |                   |  | ner   5. Location of Label Directions (   |      |                             |                                |                       |      |  |
| 6. Manner in Which Label  | ithograph<br>Paper glued<br>itenciled  |                   |  |   |      |                             |                                | <del>c</del>          |      |  |
| Section - IV  |  |                   |  |   |      |                             |                                |                       |      |  |
| 1. Contact Point   Comple   | te items directly below for identif  | ication of indivi | dual to be   | contacted, if   | nece | essery, to pr               | ocess thi                      | s application         | on.) |  |
| Name<br>Steven C. Beers   | Title Pa   | Title Partner     |  |   | ~~   | '                           | 883.6410                       | elude Area Code)      |      |  |
| l certify that the ste<br>l acknowledge that<br>both under applicab   |  |                   |  |   |      | Recei                       | Application<br>ved<br>stamped) |                       |      |  |
| 2. Signature  | 3. Title   | Partner           |  |   |      |                             |                                |                       |      |  |
| 4. Typed Name Steven C. Beers   |  |                   | 2 April 2013   |   |      |                             |                                |                       |      |  |
|   |  |                   | = · · <del>-</del> · · · · · · · · · · · · · · · · · · ·   |   |      |                             |                                |                       |      |  |

4/2/2013 2:10 PM

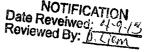
## Sodium Chlorite - Precursor for Chlorine Dioxide Solution Pack

| ACTIVE INGREDIENT: | Sodium Chlorite80% |
|--------------------|--------------------|
| INERT INGREDIENTS  | 20%                |
| AVAILABLE CHLORINI | E125%              |

#### 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 1-800-424-9300 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 of

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  $_{c}$  c

#### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavages.

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## ICA TRINOVA, LLC

1 Beavers Street, Suite B Newnan, GA 30263

EPA Reg No. 79814-3

EPA Est. 79814-GA-001

#### 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.

## PRECAUTIONARY STATEMEN ...

# 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; 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.
- 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.
- 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 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 onepass 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 of Sodium Chlorite in an immersed Modified Reactor.

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 (ClO<sub>2</sub>) 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.  $\frac{1}{1000}$  Equired 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 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 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

<u>Veliger Control</u>: Maintain a continuous chlorine dioxide residual of 0.1 – 0.5 ppm. <u>Intermittent Dose</u>: Apply chlorine dioxide to obtain a chlorine dioxide residual concentration of 0.2 – 25 ppm. Repeat as necessary to maintain control. <u>Continuous Dose</u>: 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  $0.25-5.0~\mathrm{ppm}$ . 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 selfide contamination commonly found in oilfield production, injection and disposal fluids. The required dosages will vary with process conditions. Godium 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 fefore it is feein jucted into the well.

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

## STORAGE AND DISPOSALLECCE

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 nact age 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 HANDLING AND DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by incineration if allowed by state and local authorities. If burned, stay out of smoke.

## PRODUCT PACKAGE LABEL

# Z-Series<sup>™</sup> Water Treatment Pack

Sodium Chlorite - Precursor for Chlorine Dioxide Solution

# Part A

25-gram Pack
Approx. concentration in 25 gallons water 250ppm
SKU# ZS-SCS-025P
NET WT 100 GRAMS

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID

SEE PRODUCT LABEL FOR FIRST AID PROCEDURES.

Have the Product container or label with you when calling a poison control center or doctor, or going for treatment.

# EMERGENCY HOTLINE NUMBER: 800.373.7542

HANDLING: DO NOT EAT. NEVER INHALE FUMES. Inhalation of CIO₂ gas may cause respiratory irritation. NEVER mix SODIUM CHLORITE PRECURSOR in unapproved container — ALWAYS use Reactor Sachet.

Storage and Disposal: Store in a cool dry location. Avoid ignition sources, sunlight and heat.

CONTAINER HANDLING AND DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or coccep by incineration if allowed by state and local authorities. If burned, stay out of smoke.

*HAZARD:* Intended for solution applications only, DO NOT uses  $c \stackrel{\leftarrow}{\leftarrow} c \stackrel{\leftarrow}{\leftarrow} c$  this product to generate ClO<sub>2</sub> gas in air. See MSDS and PRODUCT LABEL for complete safety and use information.

CAS Number 7758-19-2
DOT Number UN1496
Formula NaClO<sub>2</sub>



Package Label
Variables
(i.e. weight, SKU #,
production factors) are
modified and displayed
for each package size.

EPA Establishment # 79814-GA-001 EPA Registration # 79814-3

> Manufactured by ICA TriNova, LLC 1 Beavers Street, Newnan, GA USA 866.622.7350