

October 20, 2003

Ana Rodriguez-Koster  
Lewis & Harrison LLC  
122 C Street, NW  
Suite 740  
Washington, DC 20001

Subject: ERCO Worldwide  
Ercopure 25  
EPA Registration No. 53345-14  
Application Date: August 4, 2003  
Receipt Date: August 5, 2003

Dear Ms. Rodriguez-Koster:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

**Conditions**

1. The phrase "and other potable water" is not supported by acceptable efficacy data and has been deleted from the Potable Water and Wastewater Disinfection directions for use.
2. Revise the Ingredient statement as follows:

Active Ingredient:	
Sodium Chlorite .....	25.0%
Other Ingredients .....	75.0%
Total .....	100.0%

CONCURRENCES

SYMBOL	7570C						
SURNAME	Mitchell						
DATE	10-20-03						

3. *The Environmental Hazards Statement should read:*

*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.*

**General Comments**

*A stamped copy of the labeling accepted with conditions is enclosed. Submit a copy of your final printed labeling before distributing or selling the product bearing the revised labeling.*

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

*Sincerely,*



*Robert S. Brennis  
Product Manager - Team 32  
Regulatory Management Branch II  
Antimicrobials Division (7510C)*

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

**DANGER.** Corrosive. Causes eye and skin damage. Do not get in eyes, on skin or clothing. Wear goggles or face shield, and use only Neoprene gloves when handling. May be fatal if swallowed. Irritating to nose and throat. Do not breath dust, vapors or spray mist. Remove and wash contaminated clothing immediately.

**Environmental Hazards**

This product is toxic to fish. 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.

**Physical or Chemical Hazards**

Strong oxidizing agent. Mix or dilute with water only. Mixing with acids, or alcohol, or other chemicals may cause evolution of chlorite and chlorine dioxide gas mixture which is toxic and may be explosive. Combustible materials contaminated with ERCOPURE 25 may burn rapidly. Keep handling areas and equipment clean and free of oils, greases, combustibles and dust. Do not contaminate product with garbage, dirt, organic matter, paint products, solvents, acids, vinegar, beverages, oils, pine oils, dirty rags, or other foreign matter. Do not expose to hot surfaces, sparks or open flame.

ERCO Worldwide  
302 The East Mall, Suite 200  
Toronto, Ontario M9B 6C7  
CANADA

**ERCOPURE 25**

Sodium Chlorite Solution  
For Use in Generating Chlorine Dioxide to Control Microorganisms in Potable Water, Wastewater, Food Processing Plant Water, Once-Through Cooling Systems, General Industrial Process Water and Food-Contact Surfaces

<b>Active Ingredient</b>	
Sodium Chlorite.....	25.0%
<b>Inert Ingredients</b> .....	75.0%
	100.0%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

See Side Panels for Additional Precautionary Statements

<b>FIRST AID</b>	
<b>If in Eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"> <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 for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <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> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when call a poison control center or doctor, or going for treatment.	
<b>Note to Physician:</b> Probable mucosal damage may contraindicate the use of gastric lavage.	

EPA Reg. No. 53345-14  
EPA Est. No. 53345-CN-01

Net contents: 55 U.S. gals (210 liters)

**STORAGE AND DISPOSAL**

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

**STORAGE:** Avoid exposure to high temperatures during storage. Store remote from other chemicals and combustible materials. Do not skid or slide drums.

**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 directions, 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) all containers and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved of by state and local authorities.

**ACCEPTED**  
**with COMMENTS**  
**EPA Letter Dated:**

OCT 20 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 53345-14

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

### CHLORINE DIOXIDE GENERATION

ERCOPURE 25 is a precursor for the generation of chlorine dioxide. DO NOT ADD ERCOPURE 25 directly to the system being treated. Chlorine dioxide solutions can be generated from ERCOPURE 25 by several common methods including:

1. The chlorine method which utilizes a ERCOPURE 25 and chlorine gas, or
2. The hypochlorite method which utilizes ERCOPURE 25, a hypochlorite solution and an acid or,
3. The Acid-Chlorite method which utilizes ERCOPURE 25 and an acid, or
4. The electrolytic method which utilizes ERCOPURE 25, with sodium chloride as needed.

Add the generated chlorine dioxide solution to a point in the system which ensures uniform mixing. Your ERCO Worldwide representative can guide you in the selection, installation and operation for feed systems.

### APPLICATIONS

**POTABLE WATER AND WASTEWATER DISINFECTION:** For most municipal ~~and other potable water~~ systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. The concentration of total residue oxidants (chlorine dioxide, chlorite and chlorate) should be monitored such that it does not exceed 1.0 ppm in the distribution system. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

**FOOD PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES and FOOD PLANT PROCESS WATER:** For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers and retort cooling water, apply ERCOPURE 25 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 5.0 ppm.

Chlorine dioxide generated from ERCOPURE 25 may also be used as a water sanitizer for fruit and vegetable washing and cut and peeled potatoes products without a subsequent potable water rinse requirement, provided that the concentration of total residual oxidants meet the residual limitations of  $\leq 1.0$  ppm.

Residual concentrations up to 5.0 ppm chlorine dioxide in process water may be used for washing whole uncut and unpeeled fruits and vegetables although a final potable water rinse is required if the residual exceeds 1 ppm.

Potatoes, including those which have been peeled or cut, may be treated with sufficient chlorine dioxide to produce a residual concentration of up to 5.0 ppm provided this is followed by a potable water rinse.

**POULTRY PROCESSING WATER:** Use ERCOPURE 25 to generate chlorine dioxide for use as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3 ppm residual chlorine dioxide as determined by an appropriate method.

**SANITIZATION OF FOOD-CONTACT SURFACES IN FOOD-PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES:**

**Note: Only the chlorine and hypochlorite methods described above can be used to generate chlorine dioxide for sanitization of food-contact surfaces.**

Use ERCOPURE 25 to generate chlorine dioxide for use as a terminal no-rinse sanitizer for food-contact surfaces, food-processing equipment and utensils. Prior to application, remove gross food particles and soil by a pre-flush, or pre-scrape, and when necessary, pre-soak treatment. Then thoroughly wash all equipment, surfaces and utensils with a suitable detergent or cleaner, followed by a potable water rinse. Dilute the chlorine dioxide solution generated from the chlorine dioxide generator with potable water to achieve a use-solution of at least 100 ppm but not more than 200 ppm available chlorine dioxide. A contact time of at least one minute is required for sanitization. Allow the sanitizing solution to thoroughly drain and dry from all equipment and surfaces prior to recontact of the sanitized surface with food or feed items.

**GENERAL INDUSTRIAL PROCESS WATER TREATMENT (OILFIELD INJECTION WATER, WHITE WATER PAPER MILL SYSTEMS, AND RECIRCULATING COOLING TOWERS):** Use ERCOPURE 25 to generate chlorine dioxide for the control of microbial slime in the above water systems. In order to achieve adequate control, the chlorine dioxide residual concentration should be between 0.25 and 5.0 ppm.

**ONCE-THROUGH COOLING WATER SYSTEMS:** Control of mollusks can be effectively accomplished using ERCOPURE 25 as directed in commercial and industrial once-through cooling water systems. ERCOPURE 25 may be fed on a continuous or slug basis depending on the degree of system fouling.

**SLUG DOSE:** Add 42 to 210 lbs. of chlorine dioxide per million gallons of water (5 to 25 ppm).

**CONTINUOUS DOSE:** Add 2 to 16 lbs. of chlorine dioxide per million gallons of water (0.25 to 2 ppm)