

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AUG 18 1994

Eliot I. Harrison, Agent for  
Rio Linda Chemical Company  
410 N. 10th Street  
Sacramento, CA 95814

Subject: O-C F-130  
EPA Registration No. 21164-17  
Your Amendment Dated February 1, 1993

Dear Mr. Harrison:

This is in response to your label amendment for once-through cooling water systems and general revision.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. A stamped copy is enclosed for your records. Five copies of the finished labeling must be submitted before the product is released for shipment bearing the amended labeling.

1. In the second paragraph of the "Food Plant Process Water" section, delete the words "meat, seafood, poultry" (these are deleted as a handwritten revision in the enclosed label copy). Secondary direct food additive uses require clearance from the Food and Drug Administration in 21 CFR Part 173.

2. Add a net contents statement to the label.

If you have any questions about these comments, please call Wallace Powell at 703-305-6938.

Sincerely,



Ruth G. Douglas  
Product Manager 32  
Antimicrobial Program Branch  
Registration Division (7505C)

Enclosure

CONCURRENCES

SYMBOL	SURNAME	DATE					

# O-C F-130

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

**ACTIVE INGREDIENTS:**

Sodium Chlorite ..... 25.0%

INERT INGREDIENTS ..... 75.0%

TOTAL 100.0%

EPA Reg No 21164-17  
EPA Est No 21164-CA-01

**KEEP OUT OF REACH OF CHILDREN: DANGER**

**STATEMENT OF PRACTICAL TREATMENT**

- If in eyes: Flush with plenty of water. Call a physician immediately.
- If on skin: Wash with plenty of soap and water. Call a physician immediately.
- If swallowed: Drink promptly a large quantity of water. Do not induce vomiting. Avoid alcohol. Call a physician immediately.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**DOT SHIPPING NAME:**  
SODIUM CHLORITE SOLUTION  
CORROSIVE MATERIAL (8) UN 1908, II

**MANUFACTURED BY:**

# RIO LINDA

**CHEMICAL CO., INC.**

410 N. 10th STREET, SACRAMENTO, CA 95814  
(916) 443 4939

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

AUG 18 1994

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

21164-17

**BEST AVAILABLE COPY**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER: CORROSIVE. CAUSES EYE AND SKIN DAMAGE.** Harmful if swallowed. Irritating to nose and throat. Avoid breathing vapor. Do not get in eyes, on skin or clothing. Wear goggles or face shield, rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Do not discharge effluent containing this active ingredient into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**PHYSICAL OR CHEMICAL HAZARDS**

**DO NOT mix with acids or other chemicals except water.** Mixing with acid or other chemicals may cause evolution of chlorine dioxide gas, which is poisonous and explosive.

**STORAGE AND DISPOSAL**

**DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.**

**Storage:** Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood the area with large quantities of water.

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

**DIRECTIONS FOR USE:**

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

**TREATMENT:**

O-C F-130 is a source of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. It must be used only in conjunction with approved chlorine dioxide generation equipment, which utilizes chlorine gas, or a combination of chlorine solution and/or muriatic acid or food grade acid as the activating agent. In general, the chlorine dioxide solution is applied to achieve residual concentrations of 10 ppm or less. Because of the variability of demand in water and process systems the dosage of chlorine dioxide which is required to achieve the target residuals, is normally lower for continuous feed systems than for slug or timed feed applications. The minimum acceptable residual for chlorine dioxide, as determined by a verified procedure, is 0.1 ppm for a minimum one minute contact time.

**POINTS OF ADDITION**

In all cases, generated chlorine dioxide solution should be applied in such a manner to ensure adequate mixing and minimal volatilization. The water stream to be treated may either be passed directly through the chlorine dioxide generator or treated via side stream injection point. The generation system employed should be in good working order and capable of achieving chlorine dioxide solutions free from chlorine contamination. Residual determination procedures should be substantiated methods and should also be specific for chlorine dioxide or used in systems where no chlorine contamination is possible. Do not add O-C F-130 directly to process water.

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**APPLICATIONS**

**ONCE-THROUGH COOLING WATER SYSTEMS:** Control of molluscs can be effectively accomplished using O-C F-130 as directed in commercial and industrial once-through cooling water systems. Product 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)

**FOOD PLANT PROCESS WATER:** For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers, and other water systems, apply O-C F-130 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 O-C F-130 may also be used as a water sanitizer for fruit and vegetable washing and cut and peeled potatoes, ~~meat-seafood~~ ~~poorly~~ and shell egg 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.

Consult you authorized Rio Linda representative for assistance in determining the correct dosage for this application.

**AQUEOUS DISINFECTION SYSTEMS FOR CIP CLEANING:** If the concentration of chlorine dioxide generated from O-C F-130 exceeds 5.0 ppm, a potable water rinse should follow treatment. Care should be taken to ensure the biological and chemical quality of the potable water.

**RECIRCULATING COOLING TOWERS:** For control of microbial slimes in institutions, industries and food processing plants, apply O-C F-130 to achieve a chlorine dioxide concentration ranging between 0.25 and 5.0 ppm. The O-C F-130 dosage needed to achieve these levels will vary widely depending on the exact application. Please consult you authorized Rio Linda representative for assistance in determining the correct dosage level.

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