

U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS 767) WASHINGTON, DC 20460	EPA REGISTRATION NO. <b>21164-21</b> TERM OF ISSUANCE	DATE OF QUANTIFICATION <b>2 2 1986</b>
	NAME OF PESTICIDE PRODUCT <b>Conditional</b> <b>Akta Klor 80X</b>	

NOTICE OF PESTICIDE:  REGISTRATION  
 REREGERISTRATION  
*(Under the Federal Insecticide, Fungicide  
 and Rodenticide Act, as amended)*

NAME AND ADDRESS OF REGISTRANT (include ZIP code)

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**Rio Linda Chemical Company**  
**410 N. 10th Street**  
**Sacramento, CA 95814**

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NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others. **This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:**

1. Submit/cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. Make the labeling changes listed below before you release the product for shipment:
  - a. Add the phrase "EPA Registration No. 21164-21"
  - b. Revise the first sentence of the Environmental Hazards statement to read: "This product is toxic to fish and aquatic organisms."
3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL \_\_\_\_\_ DATE **2 2 1986**

A stamped copy of the label is enclosed for your records.

Sincerely,



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

Enclosures

6/1/94

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# AKTA KLOR 80X

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

ACTIVE INGREDIENTS:

Sodium Chlorite . . . . .	80.0%
INERT INGREDIENTS . . . . .	20.0%
TOTAL	100.0%

EPA Reg No.	21164- <i>ER</i>
EPA Est No.	<input type="checkbox"/> 21164-CA-01
	<input type="checkbox"/> 49163-LA-01
	<input type="checkbox"/> 53345-CN-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.

ACCEPTED with COMMENTS to EPA Letter Order

26 AUG 1994

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

21164-21

DOT SHIPPING NAME:  
SODIUM CHLORITE  
5.1 (OXIDIZER) UN 1496, PGII

NET CONTENTS:

MANUFACTURED BY:

**RIO LINDA**

CHEMICAL CO., INC.

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

**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 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**

**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:**

AKTA KLOR 80X is a source of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. It must be used only after dilution with water (to less than or equal to 25 wt % actives) and 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 AKTA KLOR 80X directly to process water.

**BEST AVAILABLE COPY**

ACCEPTED  
with COMMENTS  
to EPA Letter (encl)

AUG 1994  
Under the Federal Insecticide,  
Fungicide and Rodenticide Act as  
amended for the pesticide  
registered under EPA Reg. No.

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**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 residual 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 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 AKTA KLOR 80X 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 AKTA KLOR 80X may also be used as a water sanitizer for fruit and vegetable washing and cut and peeled potatoes 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 your 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 AKTA KLOR 80X 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.

**GENERAL INDUSTRIAL PROCESS WATER TREATMENT (OILFIELD INJECTION WATER, AQUEOUS STIMULATION SYSTEMS, WHITE WATER PAPER MILL SYSTEMS, AND RECIRCULATING COOLING TOWERS):** For control of microbial slime, these systems will require a chlorine dioxide residual concentration ranging between 0.25 and 5.0 ppm. The AKTA KLOR 80X dosage needed to achieve these levels will vary widely depending on the exact application.

**Please consult your Rio Linda representative for assistance in determining the correct dosage level.**

**ACCEPTED  
with COMMENTS  
to EPA Letter 1/2/86**

22 AUG 1986

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, this pesticide  
EPA Reg. No.

211641 21