

21164-6

6/19/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

June 19, 2007

Rose Bedwell
Occidental Chemical Corporation
5005 LBJ Freeway, Suite 2200
Dallas, TX 75244-6119

Subject: AKTA KLOR 25
EPA Registration No. 21164-6
Submission Dated: March 9, 2007
Receipt Date: March 29, 2007

Dear Ms. Bedwell:

The following amendment submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is accepted with a condition.

Conditions

Revise the Ingredient Statement as follows:

Active Ingredient:	
Sodium Chlorite	25%
Other Ingredients	<u>75%</u>
Total	100%

General Comments

A stamped copy of the labeling accepted with conditions is enclosed. Submit one 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 call Wanda Henson at (703) 308-6345.

Sincerely,

Emily H. Mitchell
Product Manager - Team 32
Regulatory Management Branch II
Antimicrobials Division (7510C)

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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 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.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix with acids or other chemicals except as indicated for the activation of this compound. Mixing with acid or other chemicals may cause evolution of chlorine dioxide gas, which is poisonous and explosive.

DIRECTIONS FOR USE

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

Directions for Use in the Mechanical or Electrolytic Generation of Chlorine Dioxide as a Disinfectant, or for Microorganism Control in Water and Wastewater Systems

AKTA KLOR 25 may be used in the mechanical generation of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. AKTA KLOR 25 is fed to chlorine dioxide generation equipment, which produces an aqueous solution of chlorine dioxide by one of the following methods of generation:

- (1) The chlorine method, which uses AKTA KLOR 25 and chlorine gas;
- (2) The hypochlorite method, which uses AKTA KLOR 25 and a combination of a hypochlorite solution, and an acid;
- (3) The acid-chlorite method, which uses AKTA KLOR 25 and an acid as the activating agent; or,
- (4) The electrolytic method which uses AKTA KLOR 25, with sodium chloride added as needed.

Your Occidental Chemical Corporation representative can guide you in the selection, installation and operation of generation systems. Consult the instructions on the chlorine dioxide generation system before using AKTA KLOR 25.

FEED REQUIREMENTS

Feed rates of AKTA KLOR 25 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, AKTA KLOR 25 may be diluted at the point of use to prepare a 3% to 7.5% active aqueous solution for use in chlorine dioxide generators.

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.

Because of the variability of demand in water and process systems, the dosage of chlorine dioxide 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.

AKTA KLC

CHLORINE DIOXIDE PRECURSOR FOR MICROORGANISM CONTROL IN WATER AND WASTEWATER

ACTIVE INGREDIENTS:

Sodium Chlorite

INERT INGREDIENTS

KEEP OUT OF REACH OF CHILDREN DANGER FIRST AID	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for at least 15 minutes. • Remove contact lenses, if present, after the first rinsing. • Call a poison control center or doctor immediately for treatment.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for at least 15 minutes. • Call a poison control center or doctor for treatment if irritation of the skin persists.
If swallowed:	<ul style="list-style-type: none"> • Have person drink a glass of water immediately. • Call a poison control center or doctor immediately. • Do not induce vomiting unless told to do so by a doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air and monitor for respiratory distress. • If cough or difficulty in breathing develops, call a doctor. • If person is not breathing, call 911 or an ambulance. • Call a poison control center or doctor for further treatment.
For emergency information call: 800-733-7272 Have the product container or label with you when calling or doctor or going to treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of	

EPA Reg. No. 21164-6

NET CONTENTS: _____ gal. (_____)

MANUFACTURED BY:



Occidental Chemical Corporation
Dallas, Texas 75380
(972) 404-3800

CHEMTREC Emergency No: 1-800-424-9303

STATEMENTS

DOMESTIC ANIMALS

Harmful if swallowed. Irritating to nose and skin or clothing. Wear goggles or face shield. Wash thoroughly with soap and water before reuse.

HAZARDS

Do not discharge effluent containing this product in other waters unless in accordance with National Sanitation System (NPDES) permit and the local discharge. Do not discharge effluent without notifying the local sewage treatment Board or Regional Office of the EPA.

ADDITIONAL HAZARDS

Indicated for the activation of this product. Avoid evolution of chlorine dioxide gas.

FOR USE

Label is inconsistent with its labeling.

For Electrolytic Generation of Chlorine Dioxide for Microorganism Control in Water Treatment Systems

Generation of chlorine dioxide for use in water treatment systems. AKTA KLOR 25 is fed to chlorine dioxide solution of chlorine dioxide by one of the following methods:

1. Chlorine gas; 2. Chlorine dioxide and a combination of a hypochlorite and sodium hydroxide.

3. Chlorine dioxide and an acid as the activating agent; or, 4. Chlorine dioxide, with sodium chloride added as needed.

This manual can guide you in the selection, installation and operation of the chlorine dioxide generation system.

REMARKS

Control of contamination and the degree of control system and residual necessary for effective disinfection may be diluted at the point of use to meet chlorine dioxide generators.

It should be applied in such a manner to ensure that the stream to be treated may either be passed through a side stream injection point. The generation system is capable of achieving chlorine dioxide solutions of various concentrations.

In continuous feed systems, the dosage of chlorine dioxide for continuous feed systems than for slug or batch treatment for chlorine dioxide, as determined by a test, is dependent on contact time.

AKTA KLOR 25

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

ACTIVE INGREDIENTS:

Sodium Chlorite 25%

INERT INGREDIENTS 75%

TOTAL 100%

**KEEP OUT OF REACH OF CHILDREN
DANGER
FIRST AID**

If in eyes:	<ul style="list-style-type: none"> • 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 or clothing:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • Have person drink a glass of water immediately if able to swallow. • Call a poison control center or doctor immediately for treatment advice. • 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:	<ul style="list-style-type: none"> • Move person to fresh air and monitor for respiratory distress. • If cough or difficulty in breathing develops, consult a physician immediately. • If person is not breathing, call 911 or an ambulance, then give artificial respiration. • Call a poison control center or doctor for further treatment advice.

For emergency information call: 800-733-3665 (24 hours)
Have the product container or label with you when calling a poison control center or doctor or going to treatment.

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

EPA Reg. No. 21164-6

EPA Est. No. 5382-KS-01

EPA Est. No. 70547-IL-01

NET CONTENTS: _____ gal. (_____)

MANUFACTURED BY:



Occidental Chemical Corporation
Dallas, Texas 75380
(972) 404-3800

CHEMTREC Emergency No: 1-800-424-9300

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, this product is registered under EPA Reg. No. 5382-KS-01
ACCEPTED with COMMENTS in EPA Letter Dated: 06-19-2007
21164-6

Residual determination procedures should be used for chlorine dioxide or used in systems with AKTA KLOR 25 directly to process water.

POTABLE WATER AND WASTEWATER: In water treatment systems, a chlorine dioxide residual is required for adequate disinfection. Residual disinfection levels required by the National Primary Drinking Water Standards. For wastewater treatment, residual concentrations up to 5.0 ppm are generally acceptable.

FOOD PROCESSING PLANTS, DAIRY: For microbial control in typical food processing systems, hydrocoolers, beverage and other systems, AKTA KLOR 25 through a chlorine dioxide generator at a concentration ranging from 0.25 to 5.0 ppm is recommended.

Water, containing up to 3 ppm residual chlorine dioxide, may be used on vegetables that are not raw agricultural commodities. Treatment of the fruits and vegetables may be by rinse, or by blanching, cooking or canning.

POULTRY PROCESSING WATER: AKTA KLOR 25 is an antimicrobial agent in water used for cleaning. Residual chlorine dioxide as determined by the test method is recommended.

AQUEOUS DISINFECTION SYSTEMS: Chlorine dioxide generated from AKTA KLOR 25 is used for treatment. Care should be taken to ensure proper dosing.

GENERAL INDUSTRIAL PROCESSING: For control of microbial slime, these systems are used. Residuals ranging between 0.25 and 5.0 ppm. Residuals will vary widely depending on the extent of contamination.

Please consult your Occidental Chemical Corporation representative for determining the correct dosage level.

STORAGE

DO NOT CONTAMINATE WATER

Storage: Store this product in a cool, dry place to prevent deterioration. In case of spill, flood, or other emergency, call CHEMTREC at 1-800-424-9300.

Pesticide Wastes: Pesticide wastes, such as pesticide, spray mixture, or rinse water, should be disposed of by use according to the label. Contact your local Environmental Control Agency, or Regional Office for guidance.

Container Disposal: Triple rinse container, or equivalent, and recleanse as approved by state and local authorities.

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AKTA KLOR 25

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

INGREDIENTS:	
Chlorite	25%
EDUCATORS	75%
TOTAL	100%

KEEP OUT OF REACH OF CHILDREN
DANGER
FIRST AID

- 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.

- 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.

- Have person drink a glass of water immediately if able to swallow.
- Call a poison control center or doctor immediately for treatment advice.
- 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.

- Move person to fresh air and monitor for respiratory distress.
- If cough or difficulty in breathing develops, consult a physician immediately.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration.
- Call a poison control center or doctor for further treatment advice.

emergency information call: 800-733-3665 (24 hours)
 product container or label with you when calling a poison control center or doctor or going to treatment.

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

21164-6 EPA Est. No. 5382-KS-01
 EPA Est. No. 70547-IL-01

NET CONTENTS: _____ gal. (_____)
MANUFACTURED BY:

Occidental Chemical Corporation
 Dallas, Texas 75380
 (972) 404-3800

ATREC Emergency No: 1-800-424-9280

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for pesticides, registered under FIFRA, Reg. No. 21164-6
 ACCEPTED with COMMENTS in EPA Letter Dated: 06-19-2007

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 25 directly to process water.

APPLICATIONS

POTABLE WATER AND WASTEWATER DISINFECTION: For most municipal and public potable water systems, a chlorine dioxide residual concentration up to 2.0 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. 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: For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers, beverage and brewery pasteurizers and bottle rinsing, apply AKTA KLOR 25 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 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 21CFR§173.300. Treatment of the fruits and vegetables with chlorine dioxide must be followed by a potable water rinse, or by blanching, cooking or canning.

POULTRY PROCESSING WATER: Use AKTA KLOR 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.

AQUEOUS DISINFECTION SYSTEMS FOR CIP CLEANING: If the concentration of chlorine dioxide generated from AKTA KLOR 25 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, 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 25 dosage needed to achieve these levels will vary widely depending on the exact application.

Please consult your Occidental Chemical Corporation representative for assistance in determining the correct dosage level.

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.

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