

21164-6

4/23/2013

1/a



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

**April 23, 2013**

Kindra Levels  
Product Stewardship Specialist  
Occidental Chemical Corporation  
P. O. Box 809050  
Dallas, TX 75380-9050

Subject: **AKTA KLOR 25**  
EPA Registration Number: 21164-6  
Application Date: April 3, 2013  
EPA Receipt Date: April 9, 2013

Dear Ms. Levels:

This acknowledges receipt of the above notification application, submitted under the provision of PR Notice 98-10, FIFRA 3(c)9.

**Proposed Notification:**

- Add the National Foundation (NSF) logo to the subject product labeling.

**General Comments:**

Based on a review of the material submitted, the following comment applies:

The notification application is acceptable. A copy of the notification has been inserted in your file for future reference.

Should you have any questions or comments concerning this letter, please contact Adam Heyward via email at [heyward.adam@epa.gov](mailto:heyward.adam@epa.gov) or by telephone at (703) 347-0274 during the hours of 6:00 am to 2:30 pm EST.

Sincerely,

A handwritten signature in black ink that reads "Mike Mendelsohn".

Mike Mendelsohn  
Acting Product Manager (32)  
Regulatory Management Branch II  
Antimicrobials Division (7510P)



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number Occidental Chemical Corporation / 21164-6	2. EPA Product Manager Monisha Harris	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Occidental Chemical Corporation / Akta Klor 25	PM# 32	
5. Name and Address of Applicant (Include ZIP Code) Occidental Chemical Corporation P.O. Box 809050 - Attn: Kindra Levels Dallas, TX. 75380-9050 <input type="checkbox"/> Check if this is a new address	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. N/A - Not Applicable Product Name N/A - Not Applicable	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Approved NSF logo added as per guidance letter by Mr. Frank Sanders of EPA, to Mr. Kenji Yano of NSF. This notification is consistent with the provisions of PR Notices 98-10 and EPA regulations in 40 CFR 152.46, and no other changes have been made to this product' labeling or to its confidential statement of formula (CSF). I understand it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, 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 Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Metal Plastic Glass Paper Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Kindra Levels	Title Product Stewardship Specialist	Telephone No. (include Area Code) 972-404-3446
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Product Stewardship Specialist	
4. Typed Name Kindra Levels	5. Date April 3, 2013	



April 3, 2013

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

USPS Certified Mail#: 7012 1010 0002 2591 7198

RE: Notification to add the NSF logo to the Akta Klor 25 label – (EPA Reg. No: 21164-6)

Dear Madam or Sir:

Enclosed is the EPA 8570-1 form, marked as a notification submission, being submitted to add the National Sanitation Foundation (NSF) logo to Occidental Chemical Corporation's existing label for Akta Klor 25, EPA Reg. No. 21164-6. This notification is being submitted in accordance with PR Notice 98-10.

The following documents have been enclosed in support of this notification:

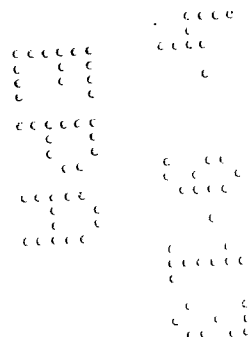
- Application for Pesticide Registration, EPA Form 8570-1
- One (1) copy of the letter from Mr. Frank Sanders, Director of Antimicrobial Division, to Mr. Kenji Yano of NSF, providing guidance on the use of the NSF logo
- A copy of the approved NSF logos from the NSF website:  
[http://www.nsf.org/business/water\\_distribution/download\\_marks.asp?program=WaterDistributionSys](http://www.nsf.org/business/water_distribution/download_marks.asp?program=WaterDistributionSys)
- One (1) copy of the proposed modification of the Akta Klor 25 label text that bears the actual NSF logo and any associated language
- One (1) copy of the proposed modification of the final Akta Klor 25 label that bears the actual NSF logo and any associated language

As stated on the 8570-1 form, the only change made to the label was the addition of the NSF logo.

Should you have any questions regarding this notification, please give me a call at (972)404-3446, or you may email me at [Kindra.Levels@oxy.com](mailto:Kindra.Levels@oxy.com).

Sincerely,

Kindra Levels  
Occidental Chemical Corporation  
Product Stewardship Specialist  
Phone: 972-404-3446, Fax: 972-404-3219  
Email: [Kindra.Levels@oxy.com](mailto:Kindra.Levels@oxy.com)



Enclosures

{All text in braces {xxx} is administrative and will not appear on a final label}  
 { All text in brackets [xxx] is optional and may or may not be included on a final label}

Column 1

## 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.

### CHEMICAL HAZARDS

Dry sodium chlorite is a strong oxidizing agent. This product becomes a fire or explosive hazard if allowed to dry. Mix only into water. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases (chlorine dioxide), and possible fire and explosion. Do not contaminate with 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.

### 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 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.

**NOTIFICATION**  
 Date Received: 4-23-13  
 Reviewed By: *[Signature]*



{All text in braces {xxx} is administrative and will not appear on a final label}  
 { All text in brackets [xxx] is optional and may or may not be included on a final label}

### Column 3

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 Basic Chemicals Company representative for assistance in determining the correct dosage level.

{All text in braces {xxx} is administrative and will not appear on a final label}  
 { All text in brackets [xxx] is optional and may or may not be included on a final label}

## STORAGE AND DISPOSAL

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

**Storage:** Keep product in tightly closed container when not in use. Don't drop, roll or skid drum. Keep upright. Always replace cover. Store in a cool, dry well-ventilated area away from heat or open flame.

**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.

(Text for non-refillable liquid containers that are 5 gallons or smaller)

### CONTAINER DISPOSAL: Nonrefillable Container.

Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple Rinse or Pressure Rinse container promptly after emptying.

**Triple Rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Pressure Rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds, after the flow begins to drip.

(Text for non-refillable liquid containers that are larger than 5 gallons)

### CONTAINER DISPOSAL: Nonrefillable Container.

Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple Rinse or Pressure Rinse container promptly after emptying.

**Triple Rinse as follows:** Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure Rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse about 40 PSI for at least 30 seconds. Drain for 10 seconds, after the flow begins to drip.

(Text for refillable liquid containers)

### CONTAINER DISPOSAL: Refillable Container.

Refill this container with [Akta Klor 25] [Supplemental distributor brand name] only. Do not reuse this container for any other purpose. Cleaning or pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

To pressure rinse the container before final disposal, empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds, after the flow begins to drip.

for NON-Refillable Containers That are larger than 5-gallons.

## 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.

## CHEMICAL HAZARDS

Sodium chlorite is a strong oxidizing agent. This product becomes a fire or explosive hazard if allowed to dry. 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 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.

## 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.

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.

# AKTA Klor 25

## CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

### ACTIVE INGREDIENTS:

Sodium Chlorite ..... 25%

OTHER INGREDIENTS ..... 75%

TOTAL 100%

### APPLICATIONS:

**POTABLE WATER AND WASTEWATER DISINFECTION:** Formic acid, 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.

## KEEP OUT OF REACH OF CHILDREN

# DANGER

### FIRST AID

**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 or clothing:**

- 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:**

- 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:**

- 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: 800-793-3665 (24 hours)**  
 Have the product container or label with you when calling a poison control center

### NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 21164-6

EPA Est. 53382-KS-01

EPA Est. 70547-IL-01

NET CONTENTS: \_\_\_\_\_ gal. ( \_\_\_\_\_ liters)

### Manufactured By:



**Occidental Chemical Corporation**  
 P. O. Box 809050  
 Dallas, TX 75380-9050

CHEMTREC Emergency No: 1-800-424-9300

### 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: Nonrefillable Container.** Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple Rinse or Pressure Rinse container promptly after emptying.

**Triple Rinse as follows:** Empty remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure Rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse about 40 PSI for at least 30 seconds. Drain for 10 seconds, after the flow begins to drip.

Label: M47030 (6460) OC\_US\_dr\_EPA (1209) R04



For non-refillable containers the 5-gallons or smaller.

# AKTA KLOOR 25

## CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

**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 waste water and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

**FOOD PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS, AND BREWERIES:** microbial control in typical processing water systems, such as fume transport, chill water systems, hydrocoolers, and brewery pasteurizers and bottle rinsing, apply AK KLOOR 25 through a chlorine dioxide generator 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§173.30c. 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 KLOOR 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 KLOOR 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 KLOOR 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.

**ACTIVE INGREDIENTS:**  
 Sodium Chlorite ..... 25%  
**OTHER INGREDIENTS** ..... 75%  
**TOTAL** ..... 100%

<b>KEEP OUT OF REACH OF CHILDREN DANGER 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 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor immediately 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 if burning or irritation of the skin persists.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Have person drink a glass of water immediately if able to swallow.</li> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not induce vomiting unless told to do so by the 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 and monitor for respiratory distress.</li> <li>If cough or difficulty in breathing develops, consult a physician immediately.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<p><b>For emergency information call: 800-733-3665 (24 hours)</b>          Have the product container or label with you when calling a poison control center.</p> <p style="text-align: center;"><b>NOTE TO PHYSICIAN:</b>          Probable mucosal damage may contraindicate the use of gastric lavage.</p>	

EPA Reg. No. 21164-6  
 EPA Est. 5820-KS-01  
 EPA Est. 70547-IL-01

**NET CONTENTS:** \_\_\_\_\_ gal. ( \_\_\_\_\_ liters)

**Manufactured By:**  
**Occidental Chemical Corporation**  
 P. O. Box 809050  
 Dallas, TX 75380-9050



**CHEMTREC Emergency No: 1-800-424-9300**

**Label: M47030 (6460) OC\_US\_Pail\_EPA (1209) R01**

### 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.

### CHEMICAL HAZARDS

Sodium chlorite is a strong oxidizing agent. This product becomes a fire or explosive hazard if allowed to dry. 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 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.

### 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 KLOOR 25 may be used in the mechanical generation of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. AKTA KLOOR 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 hypochlorite method, which uses AKTA KLOOR 25 and chlorine gas;
- (2) The hypochlorite method, which uses AKTA KLOOR 25 and a combination of a hypochlorite solution, and an acid;
- (3) The acid-chlorite method, which uses AKTA KLOOR 25 and an acid as the activating agent; or,
- (4) The electrolytic method which uses AKTA KLOOR 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 KLOOR 25.

### FEED REQUIREMENTS

Feed rates of AKTA KLOOR 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 KLOOR 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.

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 KLOOR 25 directly to process water.

### 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:** Nonrefillable Container. Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple Rinse or Pressure Rinse container promptly after emptying.

**Triple Rinse as follows:** Empty remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Pressure Rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold the container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds, after the flow begins to drip.