

# SEPA United States Environmental Protection Office of Pesticide Programs Office of Pesticide Programs

DEC 3 0 2009

Kindra V. Levels Industrial Health Specialist Occidental Chemical Corporation PO Box 809050 Dallas, TX 75380-9050



Subject:

Technical Sodium Chlorite

EPA Registration No. 5382-42

Application Date: December 03, 2009 Receipt Date: December 11, 2009

Dear Ms. Levels:

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

## **Proposed Notification:**

Revision to "Storage and Disposal" statement per PR Notice 2007-4

#### **General Comments:**

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

The notification application is acceptable and a copy has been inserted in your file for future reference.

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

Sincerely,

Wanda Y. Henson

Acting Product Manager (32)

Regulatory Management Branch II

Antimicrobials Division (7510P)

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Please read Instructions on I	Environmental	nited States Protection ngton, DC 20460		Form Approve	Reg	i No. 2070 gistrati nendme ner	on	OPP Identifier Number
		Application	for Pesticio	de - Sectio	n I	<del></del>		<u> </u>
Company/Product Number     Occidental Chemical Corporation / 5382-42			2. EPA Product Manager Emily Mitchell					posed Classification
4. Company/Product (Name) Technical Sodium Chlorite			PM# /	PM# 32				None Restricte
5. Name and Address of App Occidental Chemical Co PO Box 809050 Dallas, TX 75380-9050	-	de)	(b)(i), m to: EPA F	ny product is s	similar o	r identica	al in cor	FIFRA Section 3(c)(3) nposition and labeling
			Section - I					
Resubmission in resp  X Notification - Explain  Explanation: Use addition  Notification of label chan requirements of EPA's received PR Notice 2007-4 is on the	nal page(s) if necessaringe per PR Notice 200 gulations at 40 CFR §	y. (For section I a 07-4. This notifi § 156.10, 156.1	cation is consi		below.	ce in PR N		
			Section - I	II				
1. Material This Product Wil Child-Resistant Packaging Yes* X No * Certification must be submitted	Unit Packaging Yes X No If "Yes" Unit Packaging wgt.	No. per	Water Soluble P Yes No If "Yes" Package wgt	No. per container	2. T			pecify) bulk
3. Location of Net Contents	Information	4. Size(s) Retail bulk, 100 lb. dr			$\mathbf{X}$	of Label		ns panying product
6. Manner in Which Label is	Affixed to Product	Lithograp Paper glu Stencifed	h ed	Other				
	<del></del>		Section - I	<b>V</b> .			<del></del>	
1. Contact Point   Complete	items directly below fo	or identification o	f individual to be	e contacted, if I	necessar	y, to proc	ess this	application.)
Name Kindra V. Levels		Tit In	de dustrial Health	Specialist		W1 * Y * 1 1 / W . J	•	NS. (Include Area Code
I certify that the state	mente i have mede on	Certificatio				and comp		6. Date Application Received
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both under applicable	ny knowingly false or π	isleading statem		<del></del>		000	00	<ul><li>(Stamped)</li></ul>

5005 LBJ Freeway, Suite 2200, Dallas, TX 75244-6119 P. O. Box 809050, Dallas, TX 75380-9050 Phone 972.404.3800

December 3, 2009

Document Processing Desk (NOTIF) Office of Pesticide Programs (7504P) U.S. Environmental Protection Agency 1200 Pennsylvania Ave., NW Washington, DC 20460-0001

SUBJECT: Notification of label changes per PR Notice 2007-4

Dear Madam or Sir:

Enclosed is a pesticide registration amendment application for Occidental Chemical Corporation's **Technical Sodium Chlorite**, **EPA Reg. No. 5382-42**. The registration is being amended by notification to bring it into compliance with the current regulatory requirements of Pesticide Registration Notice (PR) 2007-4: Labeling Revisions Required by the Final Rule "Pesticide Management and Disposal; Standards for Pesticide Containers and Containment."

Enclosed you will find the following documents supporting this notification:

- Application for Pesticide Registration, EPA Form 8570-1, with an attachment
- One (1) copy of the new label (with changes highlighted)

Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, 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.

Should you have any questions regarding this registration amendment application, please give me a call at the number indicated below or you may e-mail me at kindra\_levels@oxy.com.

Sincerely,

Kindra Levels

**Enclosures** 

12/03/2009

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Below is the required notification statement from PR Notice 2007-4, which is accompanying the completed EPA form 8570-1 for the 12/03/2009 notification of amendment for the following label:

## <u>Technical Sodium Chlorite - EPA Reg. No. 5382-42</u>

"Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, 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. "

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

## TECHNICAL SODIUM CHLORITE

#### PRECAUTIONARY STATEMENTS

#### **HAZARDS TO HUMANS & DOMESTIC ANIMALS**

**DANGER. Corrosive.** Causes irreversible eye damage and skin burns. May be fatal if swallowed. Irritating to nose and throat. Do not get in eyes, on skin or clothing. Wear protective eyewear (goggles or safety glasses). Wear protective clothing and rubber gloves when handling this product. Avoid breathing dust and fumes. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse to avoid fire.

#### **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 the 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**

Danger: strong oxidizing agent. 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 moisture, 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. Do not use moist or damp utensils.

#### **DIRECTIONS FOR USE**

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

#### Directions for Controlling the Growth of Algae in Recirculating Cooling Water Towers

1. Clean badly fouled systems before starting treatment. 2. When algae are visible, add an initial dosage of 5.3 fl. oz. (3.4 oz. by wt.) of Sodium Chlorite per 1,000 gals. of water in the system. Repeat if necessary until control is evident. 3. Where algae control is evident, use a subsequent dose of 2.6 fl. oz. (1.7 oz. by wt.) of Sodium Chlorite solution per 1,000 gals. of water in the system twice a week or as needed to maintain control. 4. Add Sodium Chlorite directly to the cooling tower drip pan (cold water basin) near the inlet to the recirculating pump.

Directions for Use in the Mechanical or Electrolytic Generation of Chlorine Dioxide as a Disinfectant, or for Microorganism or Mollusk Control and as a Chemical Oxidant in Aquatic Systems.

Feed requirements: Feed rates of Technical Sodium Chlorite 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, Technical Sodium Chlorite is typically diluted at the point of use to prepare a 25% active aqueous solution for use in chlorine dioxide generators.

NOTIFICATION Date Reviewed: 12/30/09
Reviewed By: W/funsin

## TECHNICAL SODIUM CHLORITE

ACTIVE INGREDIENT: Sodium Chlorite*	80%
OTHER INGREDIENTS:	20%
*AVAILABLE CHLORINE	25%

KEE	P OUT OF REACH OF CHILDREN					
DANGER						
	FIRST AID					
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>					
	Remove contact lenses, if present, after the first 5					
	minutes, then continue rinsing eye.					
	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>					
lf on skin or	Brush off excess chemical.					
clothing:	<ul> <li>Take off contaminated clothing.</li> </ul>					
	Rinse skin immediately with plenty of water for 15- 20 minutes.					
	Call a poison control center or doctor for treatment					
l .	advice if burning or irritation of the skin persists.					
If	Have person drink a glass of water immediately if					
swallowed:	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.					
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>					
If inhaled:	Move person to fresh air and monitor for					
	respiratory distress.					
	<ul> <li>If cough or difficulty in breathing develops, consult</li> </ul>					
	a physician immediately.					
	<ul> <li>If person is not breathing, call 911 or an</li> </ul>					
	ambulance, then give artificial respiration.					
	Call a poison control center or doctor for further					
Foromo	treatment advice.					
	rgency 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 mu	Probable mucosal damage may contraindicate the use of gastric lavage.					

## Manufactured By:



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

24-Hour Emergency No: 1-800-733-3665 CHEMTREC Emergency No: 1-800-424-9300

EPA Reg. No. 5382-42

EPA Est. 5382-អន្ធ-1

#### Column 3

## TECHNICAL SODIUM CHLORITE

Some examples of industrial applications of chlorine dioxide include:

- Potable water disinfection and removal of sulfide.
- Control of bacterial slime and algae and mollusks in industrial recirculating and one-pass cooling systems.
- · Biocontrol in food processing flumes, water-using equipment, cooling water, and recycled waters.
- · Disinfection of sewage and plant wastes.
- Destruction of phenolics, simple cyanides and sulfides by chemical oxidation.
- Bacterial slime control in white water paper mill systems.
- · Bacterial control in oil well and petroleum systems.

See product bulletins (orTechnical Data Sheets) for specific application instructions. Your Occidental Chemical Corporation representative can guide you in the application techniques.

Method of feed: Large amounts of chlorine dioxide can be generated by two common methods, including:

- 1. The chlorine method which utilizes a Sodium Chlorite solution and chlorine gas, or
- 2. The hypochlorite method which utilizes a Sodium Chlorite solution, a hypochlorite solution, and an acid.

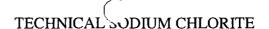
Your Occidental Chemical Corporation representative can guide you in the selection, installation and operation for feed systems. Consult product bulletin and also the instructions on the chlorine dioxide generation system before using Technical Sodium Chlorite. User is responsible for compliance with applicable Federal, state and local laws regarding proper use and disposal of the chlorine dioxide generated.

#### **Potable Water Treatment**

Chlorine dioxide (CIO2) is used as both an oxidant and a disinfectant in drinking water treatment. The required dosages will vary with source water conditions and the degree of contamination present. For most municipal and public potable water systems, a chlorine dioxide residual concentration of up to 2 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.

#### **Industrial Cooling Water Treatment**

For control of bacterial slime and algae in industrial recirculating and one-pass cooling systems, the required dosages will vary depending on the exact application and the degree of contamination present. The required chlorine dioxide residual concentrations range between 0.1 and 5.0 ppm. Chlorine dioxide may be applied either continuously or intermittently. The typical chlorine dioxide residual concentration range is 0.1 - 1.0 ppm for continuous doses, and 0.1 - 5.0 ppm for intermittent doses. The minimum acceptable residual concentration of chlorine dioxide is 0.1 ppm for a minimum one minute contact time



# 8/10

**Mollusk Control in Water Systems** 

Chlorine dioxide generated from sodium chlorite maybe used for mollusk control in commercial and industrial recirculating and one-pass cooling water systems. The required dosages will vary with the system type, system conditions, the degree of water contamination present and the desired level of control. Depending on the extent of the infestation, sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to achieve the necessary chlorine dioxide residual concentration.

Veliger Control: Maintain a continuous chlorine dioxide residual of 0.1 - 0.5 ppm.

<u>Intermittent Dose:</u> Apply chlorine dioxide to obtain a chlorine dioxide residual concentration of 0.2 – 25 ppm. Repeat as necessary to maintain control.

Continuous Dose: Maintain a chlorine dioxide residual concentration of up to 2 ppm.

#### **Food Plant Process Water Treatment**

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in flume water and other food processing water systems such as chill water systems and hydrocoolers. The required dosages will vary with process conditions and the degree of contamination present. Depending on the requirements of the specific water system, sodium chlorite should be applied continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.25 and 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.

#### **Wastewater Treatment**

Chlorine dioxide (CIO2) is effective as both a disinfectant and an oxidant in wastewater treatment. The required dosages will vary with water conditions and the degree of contamination present. For most municipal and other wastewater systems, a chlorine dioxide residual concentration of up to 5 ppm is sufficient to provide adequate disinfection. For sulfide odor control, between pH 5-9, a minimum of 5.2 ppm (wt) of chlorine dioxide should be applied to oxidize 1 ppm of sulfide (measured as sulfide ion). For phenol destruction, at pH less than 8, 1.5 ppm chlorine dioxide will oxidize 1 ppm phenol; at pH greater than 10, 3.3 ppm chlorine dioxide will oxidize 1 ppm phenol.

#### **Bacterial Slime Control in Paper Mills**

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in white water paper mill systems. The required dosages will vary with the degree of microbiological and process contamination present. Depending on the specific requirements of the system, sodium chlorite should be applied continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.1 and 5.0 ppm. Intermittent treatments should be repeated as often as necessary to maintain control.

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## TECHNICAL SODIUM CHLORITE

#### **Bacterial Control In Oil Wells And Petroleum Systems**

Chlorine dioxide is effective in the remediation of bacterial and sulfide contamination commonly found in oilfield production, injection and disposal fluids. The required dosages will vary with process conditions. Sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to oil well production water as it is separated from the oil, and before it is re-injected into the well.

For continuous feeds, chlorine dioxide may be applied at dosages slightly higher than sulfide's oxidative demand as determined by a demand study. For intermittent treatment, chlorine dioxide should be applied at a shock dosage of 200 - 3000 ppm.

#### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. 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. **EMERGENCY HANDLING:** In case of contamination or decomposition, do not reseal container. If possible, isolate container in open and well ventilated area. Flood with large volumes of water. If fire occurs, extinguish fire by applying large quantities of water. Any unopened drums near the fire should be cooled by spraying with water.

**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 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 solid containers that are smaller than 50 lbs.}

CONTAINER DISPOSAL: Nonrefiliable Container.

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

Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 4 full with water and recap!

Shake for 10 seconds: Pour insate 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.

{Text for non-refillable solid containers that are larger than 50 lbs.}

CONTAINER DISPOSAL: Nonrefillable Container.

Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple 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.

{Text for refillable solid containers - all sizes}

CONTAINER DISPOSAL: Refillable Container.

Refill this container with [Technical Sodium Chlorite] or [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.

Column 6

## TECHNICAL DOIUM CHLORITE

Sodium Chlorite, UN1496 CAS Registry No. 7758-19-2

#### UNDER THE OXIDIZER SYMBOL

#### **CLORITO DE SODIO TECNICO**

#### **DECLARACIONES PRECAUTORIAS**

Peligros Para Los Seres Humanos y Los Animales Domesticos PELIGRO! Corrosivo! Causa daños oculares irreversibles y quemaduras cutáneas. Nocivo, si se ingiere. Irritante para la nariz y la garganta. Evítese el contacto con los ojos, la piel o las ropas. Úsese protección para los ojos (gafas o anteojos de seguridad). Úsense ropas protectoras y guantes de caucho, al manipular este producto. Evítese respirar el polvo y las emanaciones. Lávese cuidadosamente con agua y jabón, después de manipular el producto. Quítense las ropas contaminadas, y lávense antes de usarlas nuevamente, para evitar incendios.

#### **Peligro Quimico**

PELÍGRO! Es un agente fuertemente oxidizante. Mezcle sólo en el agua. La contaminación puede iniciar una reacción química con generación de calor, liberación de gases peligrosos (dióxido de cloro: un gas venenoso, explosivo), e incendio y explosión. Evite todo contacto con llamas o materiales en combustión, como cigarrillos encendidos. No se lo contamine con humedad, basura, tierra, materias orgánicas, productos de uso casero, químicos, productos de jabón, disolventes, ácidos, vinagre, bebidas, aceites, aceite de pino, trapos sucios, o cualquier otra materia extraña. No utilice utensilios húmedos o mojados.

#### **Peligros Para El Medio Ambiente**

Este producto es peligroso para los peces y organismos acuáticos. No se viertan los efluentes que contengan este producto, en los lagos, arroyos, pozos, estuarios, océanos u otras aguas. No se viertan los efluentes que contengan este producto en los sistemas de alcantarillado, sin avisar antes a las autoridades de la planta local de depuración de aguas negras.