

90094-1

11/6/2013

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Antimicrobials Division (7510P)  
 1200 Pennsylvania Avenue NW  
 Washington, D.C. 20460

EPA Reg. Number: 90094-1	Date of Issuance: <b>NOV 6 2013</b>
Term of Issuance: <b>Conditional</b>	
Name of Pesticide Product:  <b>Sodium Chlorite Technical</b>	

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration  
 (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):  
 DRS Laboratories, Inc.  
 P. O. Box 20247  
 Lehigh Valley, PA 18002

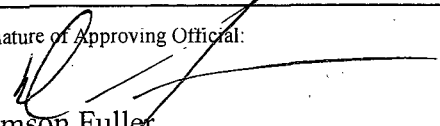
Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

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. Registration is in no way to be construed as an endorsement or recommendation of this product by the 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.

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec. 3(c)(7), provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and it's implementing regulation at 40 CFR 152.3.

Signature of Approving Official:  
  
 Demson Fuller,  
 Acting EPA Product Manager 32  
 Regulatory Management Branch II  
 Antimicrobials Division (7510P)

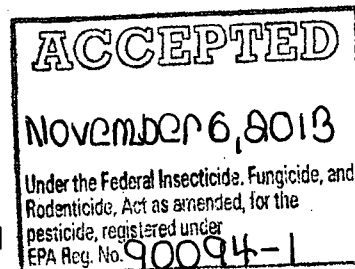
Date:  
  
**NOV 6 2013**

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

# Sodium Chlorite Technical

ACTIVE INGREDIENT: Sodium Chlorite\* ..... 80%  
OTHER INGREDIENTS: ..... 20%  
TOTAL ..... 100%

\*AVAILABLE CHLORINE ..... 125%



**KEEP OUT OF REACH OF CHILDREN  
DANGER**

FIRST AID	
If in eyes	<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 for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Brush off excess chemical.</li> <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.</li> </ul>
If swallowed	<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>
If inhaled	<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, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<p><b>For Chemical Emergency call CHEMTREC (24 hours): 800-424-9300 (Within USA &amp; Canada) +1 703-527-3887 (Outside USA &amp; Canada)</b></p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p><b>NOTE TO PHYSICIAN</b></p> <p>Probable mucosal damage may contraindicate the use of gastric lavage.</p>	

EPA REG. NO.: 90094-1  
EPA EST. NO.: \_\_\_\_\_

NET. CONTENTS {as indicated on the container}  
Lot. No. {as indicated on the container}

Manufactured by:  
DRS Laboratories, Inc.  
P.O. Box 20247  
Lehigh Valley, PA 18002  
Phone: 1-888-377-1533  
www.drslaboratories.com

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## 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 on clothing. Wear protective eyewear (goggles or safety glasses). Wear protective clothing and rubber gloves when handling this product. Avoid breathing dust or fumes. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing 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.

### PHYSICAL AND 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 is 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 this 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 Sodium Chlorite Technical 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, Sodium Chlorite Technical is typically diluted at the point of use to prepare a 25% active aqueous solution for use in chlorine dioxide generators.

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Some examples of industrial applications of chlorine dioxide include:

- Potable water disinfection and removal of sulfide.
- Control of bacterial slime, 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.

**Method of feed:** Large amounts of chlorine dioxide can be generated by several 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 DRS Laboratories representative can guide you in the most appropriate selection, installation, and operation of feed systems for your specific needs and situation.] Before using this product, consult the instructions specific to the chlorine dioxide generation/feed equipment to confirm that it is both appropriate for the intended use and compatible with this product. User is responsible for compliance with applicable Federal, state and local laws regarding the proper use and disposal of the chlorine dioxide generates.

### **Potable Water Treatment**

Chlorine dioxide ( $\text{ClO}_2$ ) 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 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.

### **Mollusk Control in Water Systems**

Chlorine dioxide generated from sodium chlorite may be 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.

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

**Intermittent Dose:** 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 (ClO<sub>2</sub>) 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.

### **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.

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## STORAGE AND DISPOSAL

**PESTICIDE 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.

{For non-refillable solid containers smaller than 50 lbs.}

**[CONTAINER HANDLING: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  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. Turn the container over onto its other 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. Then offer for recycling if available or reconditioning.]

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

**[CONTAINER HANDLING: 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  $\frac{1}{4}$  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 mix tank or store rinsate for later use or disposal. Repeat the procedure two more times.]

{For refillable containers, all sizes.}

**[CONTAINER HANDLING: Refillable container.** Refill this container with Technical Sodium Chlorite only. Do not reuse this container for any other purpose. Cleaning or pressure rinsing the container 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% full of 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.]