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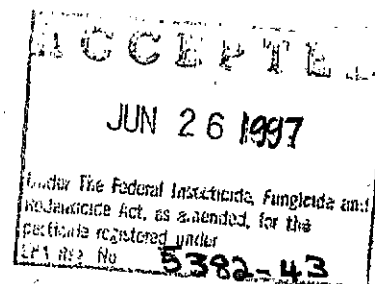
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# TECHNICAL SODIUM CHLORITE SOLUTION 31.25

(25% Active Sodium Chlorite)

ACTIVE INGREDIENT: Sodium Chlorite\* .....25%  
INERT INGREDIENTS: .....75%  
\*AVAILABLE CHLORINE .....39%

CONTAINS 2.58 LBS. OF SODIUM CHLORITE PER  
GALLON AT 70°F



**KEEP OUT OF REACH OF CHILDREN  
DANGER!**

## STATEMENT OF PRACTICAL TREATMENT

If on skin-	Flush skin with cold water for at least 15 minutes. Call physician.
If Swallowed-	Give large amounts of water. Call a physician.
If in Eyes-	Flush with cold water for at least 15 minutes. Call a physician.

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONS

EPA Reg. No. 5382-43

EPA Est. 5382-KS-1

Gals.Net ( )

**Vulcan  
CHEMICALS**

A Division of Vulcan Materials Company  
P O Box 530390, Birmingham Alabama 35253-0390

VMC-6400 (5/97)

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## **PRECAUTIONARY STATEMENTS**

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

#### **DANGER**

Highly corrosive. Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, or on skin, or clothing. Do not handle with bare hands. Wear goggles or face shield and neoprene gloves and use only thoroughly clean, dry utensils when handling. Irritating to nose and throat. Avoid breathing fumes. Remove and wash contaminated clothing to avoid fire.

### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to 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**

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 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 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 8.4 fluid ounces 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 4.2 fluid ounces 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.

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**Directions for use in the mechanical 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 Solution 31.25 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.

**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 for specific application instructions. Your Vulcan representative can guide you in the application techniques.**

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

- 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 Vulcan 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 Solution 31.25.**

User is responsible for compliance with applicable federal, state and local laws regarding proper use and disposal of the chlorine dioxide generated.

**Directions for use in controlling microbial population in poultry chill water in federally inspected plants.**

Chlorine dioxide generated from Technical Sodium Chlorite Solution 31.25 may be used as an antimicrobial agent in poultry chill water, provided that the residual concentration of chlorine dioxide does not exceed 3 ppm.

Apply Technical Sodium Chlorite Solution 31.25 as necessary through a chlorine dioxide generation system to maintain a residual concentration of up to 3 parts per million (ppm) chlorine dioxide at the midway point in the chill tank. Chlorine dioxide should be fed below the water level in the chill water tank.

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## 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.

**CONTAINER DISPOSAL:** Triple rinse container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

16.07.97



# TECHNICAL DATA SHEET

TECHNICAL &amp; ENVIRONMENTAL SERVICES

1-800-873-4898

## Poultry Chill Water

### Application Description

The processing of poultry carcasses for packaging provides significant potential for bacterial contamination. Most bacterial contamination occurs on the body surface, and may come from flora on the skin, mud or filth from the feet or from crop material or feces forced out of the bird during processing. Removal of this contamination is accomplished by washing during the processing operation.

Following washing, the birds are submerged in chilled water (34 °F) to remove the body heat as quickly as possible. The chilled water soon becomes contaminated, and can lead to cross contamination of the birds. USDA regulations require the use of antimicrobial pesticides to control the microbial population in poultry chill water.

Chlorine has long been the pesticide of choice for poultry processing. However, chlorine has been known to react with organic contaminants in the process water to form potentially toxic trihalomethanes (e.g. chloroform.)

On March 3, 1995, the FDA published a final rule permitting chlorine dioxide to be used in place of chlorine in this process. Chlorine dioxide generated from Technical Sodium Chlorite Solution 31.25 has been demonstrated to be effective in this application.

Chlorine dioxide is effective at lower dosage levels than those required with chlorine. Unlike chlorine, it does not form trihalomethanes in the process.

### Feed Requirements:

For effective control of the microbial population in poultry chill water, apply Technical Sodium Chlorite Solution 31.25 as necessary through a chlorine dioxide generation system to maintain a residual concentration of up to 3 parts per million (ppm) chlorine dioxide at the midway point in the chill tank.

NOTE: The generator effluent must contain at least 90% (by wt.) purity chlorine dioxide. (21 CFR 173.63a)

### Method of Feed:

For poultry chill water applications, chlorine dioxide should be fed below the water level in the chill water tank.

Vulcan Materials Company, Chemicals Division, believes the information contained herein is accurate; however, Vulcan Materials Company, Chemicals Division, makes no guarantee with respect to results, and assumes no liability in connection with the use of the information contained herein by any party. Neither the provision of the information contained herein nor the provision of information by the Technical and Environmental Services Department should be construed as legal advice or as ensuring compliance with all federal, state, and local laws and regulations. Any party using sodium chlorite should review all such laws, rules or regulations prior to using sodium chlorite.