# HYG-25

For use in Closed System Mechanical Generation of Chlorine Dioxide only for Microbial Control in Recirculating Cooling Towers and Systems and Pulp and Paper Mill Systems
Slimicide
Solution
COMMERCIAL

DANGER
[Poison symbol in octagon][Corrosive symbol in octagon]
POISON
CORROSIVE TO EYES AND SKIN

READ THE LABEL BEFORE USING

REGISTRATION NO.: 27601
PEST CONTROL PRODUCTS ACT

**ACTIVE INGREDIENT:** 

Sodium Chlorite ...... 25%

Net Contents: [18 to 1250] L

Nalco Canada ULC. 1055 Truman St., P.O. Box 5002 Burlington, Ontario L7R 3Y9 TEL: (905) 633-1000

PHONE IN CASE OF EMERGENCY: CANADA 1-800-463-3216 (24 HOURS)

## **USE RESTRICTION:**

This product is only to be used in closed system chlorine dioxide generators for controlling slime forming organisms in recirculating cooling towers and systems and pulp and paper mill systems. Follow all instructions for the chlorine dioxide generator carefully and follow all safety measures required for the use of this product and generator. Generators are to be installed, adjusted and maintained by specially trained service representatives only. Not intended for use in potable water systems.

#### **DIRECTIONS FOR USE:**

To generate chlorine dioxide, use a chlorine dioxide generator. Consult the chlorine dioxide generating system's bulletin and instructions on the device before using HYG-25. Your Nalco representative can guide you in the selection, installation and operation for feed systems.

HYG-25 is fed into a chlorine dioxide generation equipment, which produces an aqueous solution of chlorine dioxide by one of the following methods of generation:

- 1. The chlorine dioxide generator reacts HYG-25 with chlorine or a chlorine solution and hydrochloric acid to produce an aqueous solution of chlorine dioxide.
- 2. The acid-chlorite method, which uses HYG-25 and mixed acid as the activation agent to produce an aqueous solution of chlorine dioxide.
- 3. The electrolytic method which uses HYG-25 to produce an aqueous solution of chlorine dioxide.

This solution of chlorine dioxide is then added at a point in the processing system to be treated which ensures uniform mixing. Feed points should be well below the surface of the water to prevent volatilization of the chlorine dioxide. Do not apply HYG-25 directly to the system being treated. Follow all instructions in the chlorine dioxide generator manual carefully.

# INDUSTRIAL PROCESS WATER TREATMENT -RECIRCULATING COOLING TOWERS AND SYSTEMS

For food plants and other industrial uses. The product is to be used in water systems where the treated water will not contact food or food contact surfaces in food establishments.

HYG-25 is a source of chlorine dioxide used for microbial control in recirculating cooling towers and systems. The required dosage rate, frequency and concentration will vary for each user depending on the degree of microbiological and process contamination present, the temperature and the pH. Typical concentrations of chlorine dioxide are between 0.5 - 5.0 ppm for continuous doses, and between 5.0 ppm and 100 ppm for intermittent shock doses.

# -PULP AND PAPER MILL SYSTEMS

HYG-25 is a source of chlorine dioxide used for microbial control in pulp and paper mill systems. The required dosage rate, frequency and concentration will vary for each user depending on the degree of microbiological and process contamination present, the temperature and the pH. Typical concentrations of chlorine dioxide are between 0.5 - 5.0 ppm for continuous doses, and between 5.0 ppm and 100 ppm for intermittent shock doses.

## **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. **DANGER** - CORROSIVE TO EYES AND SKIN. May be fatal if absorbed through the skin, swallowed or inhaled. Do not get in eyes, or on skin, or clothing. Do not inhale. Wear long sleeved shirt and long pants, chemical resistant gloves, goggles or face shield and chemical resistant apron and boots when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, smoking and using the toilet. Remove contaminated clothing and wash before reuse. DO NOT WEAR contaminated clothing. Do not use in food handling areas. Do not contaminate, directly or indirectly, food products during use.

## **ENVIRONMENTAL PRECAUTIONS:**

This product is highly toxic to aquatic invertebrates and moderately toxic to waterfowl. Do not contaminate lakes, ponds, rivers, streams, estuaries or oceans by direct application, cleaning of equipment or disposal of wastes. Open dumping is prohibited. Do not discharge effluent that has been treated with chlorine dioxide generated by this product into these waters unless the effluent has been detoxified by suitable means such as waste treatment.

## **CHEMICAL HAZARDS:**

Sodium chlorite is corrosive and a strong oxidizing agent. Contact with organic matter may cause fire or explosion. Mix only into water. Mixing with acids, alcohol or other chemicals may cause evolution of chlorine and chlorine dioxide gas which is toxic and may be explosive. Avoid contaminating with combustible materials, such as oils, grease, solvents, and paint products as rapid burning may occur.

## **FIRST AID:**

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. If Swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. 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 centre or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

## **TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

## **DISPOSAL:**

Porta-Feed System: 1. Close valve. 2. Arrange for return of Porta-Feed.

For all other containers:

- 1. Triple or pressure—rinse the empty container. Add rinsings to the treatment site.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. If container is to be disposed, make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the disposal of unused, unwanted product, contact the manufacturer or the Provincial Regulatory Agency.

Contact the Manufacturer and the Provincial Regulatory Agency in case of spill and for cleanup of spills.

## **STORAGE**

Do not store in food handling areas. Do not contaminate water, food or feed by storage or disposal. Keep product in tightly closed container when not in use. Do not drop, roll or skid drum. Keep upright. Always replace cover. Store in a cool (< 25°C), dry, well-ventilated area away from heat or open flame.

## **DECONTAMINATION:**

Contain spilled material. Do not allow oxidizable or other incompatible materials to come into contact with spilled materials. DO NOT FLUSH INTO SURFACE WATERS.

## **NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Lot No.:

TDG Shipping Name: CHLORITE SOLUTION, Class 8, UN1908, PGII