IVR-SAN 7.5

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER

ACTIVE INGREDIENTS:
Sodium Chlorite ................................................... 7.5%
INERT INGREDIENTS ............................................... 92.5%
TOTAL ................................................................. 100.0%

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 immediately 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 medical information call: 800-424-6300 (24 hours)
Have the product container or label with you when calling a poison control center or doctor for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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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 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
IVR-SAN 7.5 may be used in the mechanical generation of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. IVR-SAN 7.5 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 IVR-SAN 7.5 and chlorine gas;
(2) The hypochlorite method, which uses IVR-SAN 7.5 and a combination of a hypochlorite solution, and an acid;
(3) The acid-chlorite method, which uses IVR-SAN 7.5 and an acid as the activating agent; or,
(4) The electrolytic method which uses IVR-SAN 7.5, with sodium chloride added as needed.
Your CH2O representative can guide you in the selection, installation, and operation of generation systems. Consult the instructions on the chlorine dioxide generation system before using IVR-SAN 7.5.

FEED REQUIREMENTS

Feed rates of IVR-SAN 7.5 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, IVR-SAN 7.5 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 IVR-SAN 7.5 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 BREWRIES: 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 IVR-SAN 7.5 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 IVR-SAN 7.5 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 in accordance with 21CFR § 173.300.

AQUEOUS DISINFECTION SYSTEMS FOR CIP CLEANING: If the concentration of chlorine dioxide generated from IVR-SAN 7.5 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 IVR-SAN 7.5 dosage needed to achieve these levels will vary widely depending on the exact application.

Please consult your CH2O representative for assistance in determining the correct dosage level.

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 cool, dry well-ventilated area away from heat or open flame.

EMERGENCY HANDLING: In case of contamination or dermal exposure, 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, rinse water or rinse rinse is a violation of Federal Law. If these wastes are 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: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning if appropriate. Triple rinse or Pressure Rinse rinse container promptly after emptying.

5 Gallons Containers:
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 1/4 full with water and recup. Shake for 10 seconds. Pour rinseate into application equipment or a mix tank or store rinseate 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 rinseate for later use or disposal. Insert pressure rinseing 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.

Containers Over 5 Gallons:
Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Recharset 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 rinseate into application equipment or a mix tank or store rinseate 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 rinseate for later use or disposal. Insert pressure rinseing 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.

NET CONTENTS: __________ gallons (__________ liters)