DIRECTIONS FOR USE (cont’d)

Impounded lake, pond and reservoir water, including industrial waste water

To control microorganisms and algae that cause unacceptable odors and slime, these aquatic systems may include the use of chlorination as a part of the treatment process. To achieve an acceptable concentration of the algae and slime-causing organisms, the chlorine residual concentration must be maintained at a level of at least 0.5 ppm, or a chlorination dose of 10 mg/L. A treatment contact time is necessary to achieve a residual concentration of 5 ppm. In order to achieve adequate control of odor and slime caused by algae and microorganisms.

Sewage and wastewater systems

Disinfection/inactivation of E. coli, and other coliform bacteria, are achieved by adding chlorine dioxide to achieve a residual concentration of at least 3 ppm. To control odor caused by sulphides associated with sewage and wastewater, a minimum of 5.2 ppm of chlorine dioxide must be applied to obtain the 1 ppm sulfide (measured as sulfide) on the pH range of 5.0 to 6.0.

A. Apply chlorine dioxide at a residual concentration of 5 ppm when the pH is greater than 7.0. At a 5.5 ppm of chlorine dioxide is required.

B. Chlorine dioxide is an effective disinfectant and algae and slime control agent.

Storage and Disposal Statement for non-refrangible Incal broth

This product may also be used to generate chlorine dioxide for non- pharmaceutical uses such as:

- Oxidizing fumarates
- Reducing sulde
- Eliminating odors
- Clorinating/processing organic and inorganic particles
- Controlling scale & deposits
- Controlling iron & manganese
- Controlling corrosion
- Destruction of odors caused by phenolic simple cyanides and
- Sulphates by chemical oxidation

Storage and disposal

- Do not store chlorine dioxide, or feed by storage or disposal.
- PESTICIDE STORAGE: Store in the original container. Store at ambient temperatures from 40°F to 100°F. Store separately from sulfuric acid and all other materials. Store in the area separate from food, feed, and other materials such as: acids, powders, metals, organic chemicals, combustible materials, and dirt. Clean spills immediately.

PESTICIDE DISPOSER: Pesticides are coated or treated with a polymer dispersant which could result in a condition referred to as "dust cloud." This condition is not explosive, but the material may present a fire, health, and safety hazard. Invert the mixing nozzle in the side of the container, and rinse at about 40 PSI for at least 15 seconds, then work the nozzle in place for another 15 seconds. Rinse again, and allow to dry before offering for recycling or recondionng. If recycling is unavailable, puncture and dispose of container in a sanitary landfill, or by incineration.

Nitrogen, 33% (N₂)

UN 2428, SODIUM CHLORATE, AQUEOUS SOLUTION, 5.1

[RG Hydrogen Peroxide, RG AMT: 13,330 lb]

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Harmful if absorbed through the skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield. If skin or eye irritation occurs, or if irritation persists, consult a physician. If accidental ingestion is likely, wear a PTO and rubber raincoat and wash down raincoat after each use. Use protective gloves, plastic or rubber safety gloves, leather or rubber boots, and protective clothing.

Do not store chlorine dioxide, or feed by storage or disposal.

PESTICIDE STORAGE: Store in the original container. Store at ambient temperatures from 40°F to 100°F. Store separately from sulfuric acid and all other materials. Store in the area separate from food, feed, and other materials such as: acids, powders, metals, organic chemicals, combustible materials, and dirt. Clean spills immediately.

PESTICIDE DISPOSER: Pesticides are coated or treated with a polymer dispersant which could result in a condition referred to as "dust cloud." This condition is not explosive, but the material may present a fire, health, and safety hazard. Invert the mixing nozzle in the side of the container, and rinse at about 40 PSI for at least 15 seconds, then work the nozzle in place for another 15 seconds. Rinse again, and allow to dry before offering for recycling or recondionng. If recycling is unavailable, puncture and dispose of container in a sanitary landfill, or by incineration.

Nitrogen, 33% (N₂)

UN 2428, SODIUM CHLORATE, AQUEOUS SOLUTION, 5.1

[RG Hydrogen Peroxide, RG AMT: 13,330 lb]
**First Aid**

- **Hold eye open and flush with a directed stream of water for 15 to 20 minutes.** Remove contact lenses, if present, after the first 5 minutes. **Call a poison control center or doctor for treatment advice**.

- **Take off contaminated clothing.**

- **Rinse skin with plenty of water for 15 to 20 minutes.** **Call a poison control center or doctor immediately for treatment advice.**

- **Do not induce vomiting unless told to do so by a poison control center or doctor.**

- **Do not give anything by mouth to an unconscious person.**

**DIRECTIONS FOR USE**

- **General Directions:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Only for use as indicated on the following pages. Purified DW is for use only in the BVP-Pure Chlorine Dioxide Generator, a preassembled device designed to generate chlorine dioxide for the regulated uses listed below. Test results for Purified DW are determined by the operator to achieve the desired production rate for chlorine dioxide. As described below, the appropriate procedure will depend on Purified DW's use. For the following uses, the desired, the size of the chlorine dioxide concentration necessary for effective control. For all uses, the point of need of chlorine dioxide must be below the level used to prevent visualization of chlorine dioxide. Chlorine dioxide must be added to the water stream at a point where adequate mixing and uniform distribution can occur. Drilling Water Treatment Wells. This product is approved for use in water treatment facilities that produce saleable drinking water in compliance with the Safe Drinking Water Act. A typical dosage of chlorine dioxide for water systems is between 0.03 and 3.0 parts per million (ppm). Purified DW has been approved by the National Sanitation Foundation for use in direct-contact water treatment systems. The sanitary character of the water must be studied and determined. A method for the determination of chlorine dioxide concentration between 0.1 and 2.5 ppm is necessary. Chlorine dioxide may be added intermediately, or on a continuous basis to achieve the desired residual; the concentration maintained is dependent on individual systems.

**INDUSTRIAL PROCESS WATER USES:**

This product is approved for the control of microorganisms, algal and molluscan populations in industrial processes on NSF approved water treatment equipment. The dosage of chlorine dioxide is based on the specific use; see specific directions below. Purified DW may be used to treat the following aquatic systems:

- **Biocidal Treatment of Cooling Water Towers.** To control microbial and algal slime in recirculating cooling water systems, an intermittent or continuous aeration system is required. It is not approved for use in dashboards, or mobile chlorine dioxide concentrations between 0.1 and 1.0 ppm. If using intermittent feed, maintain a residual concentration of 0.1 to 1.0 ppm. Chlorine dioxide must be added to dish water, cold water, or other places where adequate mixing and uniform distribution can occur. Once-Through Cooling Water Towers. To control odors and reduce bacterial slime in recirculating cooling water systems, and intermittent dose of 0.2 to 2 ppm necessary, the exact dose is dependent on the application potential. If a continuous dose is required, apply continuous feed, chlorine dioxide at rates of 0.2 to 0.3 ppm in the cooling water system. The attachment of the free swimming tunicate or motile (viltergum), apply a continuous feed to achieve a residual of 0.3 to 0.5 ppm. Chlorine dioxide must be added to dish water, cold water, or other places where adequate mixing and uniform distribution can occur. Textile processing water and pulp and paper process water. The addition of chlorine dioxide to the process water system. Add chlorine dioxide at rates of 0.1 to 0.5 ppm of chlorine dioxide in the process water system. When the body is fully loaded, it must be treated with a pump or dispersion system to achieve a residual concentration of 0.1 ppm. To control odor and reduce bacterial slime in cooling and warm water systems such as canning, reft, and paper processing water, chlorine dioxide may be added intermittently to achieve a dose of 0.4 ppm.

**DIRECTIONS FOR USE (cont'd)**

- **Impounded lakes, pond and reservoir water, sewer water, etc.:**

  - **To control microorganisms and algae that cause unacceptable odors and slime; these aquatic sites may be treated with chlorine dioxide as an intermittent feed.** Sufficient chlorine dioxide must be added to produce a residual concentration of 0.1 ppm, in order to achieve adequate control of odor and slime caused by algae and microorganisms.

**Sewage and Wastewater Systems:**

- **For disinfection/sterilization of sewage and wastewater, and chlorine dioxide to achieve a concentration of up to 5 ppm.** To control odors caused by sulfides associated with sewage and wastewater, a minimum dose of 0.5 ppm chlorine dioxide must be added to achieve a dose of 0.1 ppm. A minimum of 1.5 ppm chlorine dioxide will achieve a 1 ppm residual if the pH is less than 9. A minimum of 0.5 ppm chlorine dioxide is required. Gas and oil recovery injection water, fracturing system fluids **NOT APPROVED FOR USE IN CALIFORNIA.**

  - **To control sulfide reducing bacteria that form colloidal sulfur or iron sulfides, and to oxidize sulfides, or intermittent application of chlorine dioxide may be used.** If using a continuous feed of chlorine dioxide, apply at rates slightly higher than the sulfide oxidized. As determined by a sulfide demand study. If using an intermittent feed, apply a shock dose of 200-300 ppm chlorine dioxide. Please be careful that this product is not discharged into lakes, streams, ponds, coasts or other waters or without the consent of the local State or Federal Water Pollution Control Agency.

**Ultrasonic tank water: photo processing wash water; and leather processing solutions.**

- **Acid APPROVED FOR USE.**

  - **To control slime caused by microbial populations in these liquid systems, a residual chlorine dioxide concentration between 0.25 to 0.5 ppm is necessary. Chlorine dioxide may be added intermittently, or on a continuous basis to achieve the desired residual; the concentration maintained is dependent on individual systems.**

**Agricultural Water Uses (Non-Food Contact):**

- **Purified DW is approved for use in the control of microbial populations in water for the following non-food contact uses:**

  - **For livestock, ornamental plants, and other uses:**

    - **Drilling Water Treatment Wells.** To control microbial and algal slime in recirculating cooling water systems, an intermittent or continuous aeration system is required. It is not approved for use in dashboards, or mobile chlorine dioxide concentrations between 0.1 and 1.0 ppm. If using intermittent feed, maintain a residual concentration of 0.1 to 1.0 ppm. Chlorine dioxide must be added to dish water, cold water, or other places where adequate mixing and uniform distribution can occur. Once-Through Cooling Water Towers. To control odors and reduce bacterial slime in recirculating cooling water systems, and intermittent dose of 0.2 to 2 ppm necessary, the exact dose is dependent on the application potential. If a continuous dose is required, apply continuous feed, chlorine dioxide at rates of 0.2 to 0.3 ppm in the cooling water system. The attachment of the free swimming tunicate or motile (viltergum), apply a continuous feed to achieve a residual of 0.3 to 0.5 ppm. Chlorine dioxide must be added to dish water, cold water, or other places where adequate mixing and uniform distribution can occur. Textile processing water and pulp and paper process water. The addition of chlorine dioxide to the process water system. Add chlorine dioxide at rates of 0.1 to 0.5 ppm of chlorine dioxide in the process water system. When the body is fully loaded, it must be treated with a pump or dispersion system to achieve a residual concentration of 0.1 ppm. To control odor and reduce bacterial slime in cooling and warm water systems such as canning, reft, and paper processing water, chlorine dioxide may be added intermittently to achieve a dose of 0.4 ppm.

**Storage and Disposal Statement for subsequent containers:**

- **Do not contaminate water, food, feed or storage or disposal.**

**FESTIVAC STORAGE:**

- **Store the original container. Store at ambient temperatures from 40°F to 100°F. Store accurately from sulfite acid product and other acids. Store in fire-resistant area separate from incompatible materials.**

**PRECAUTIONARY STATEMENTS:**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS:**

- **Danger.** Contact with chlorine dioxide may cause eye, nose, throat or skin irritation. Inhale through the skin or inhaled. Not for use in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield. When contact is likely, wear a PVC or rubber coat and wash down raincoat after each use. Wear protective gloves, plastic or rubber. Wear plastic or rubber safety boots. Leather and cloth clothing contaminated with chlorine dioxide are highly flammable and may ignite with minor friction. Remove and wash contaminated clothing before re-use. Do not allow contaminated cloth to dry before washing clothing on-site. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**ENVIRONMENTAL HAZARDS:**

- **This product is toxic in fish and aquatic organisms. Do not discharge effluents containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of the Federal Water Pollution Control Act (1972) and the permits and the permitting authority has been notified in writing prior to discharge. Do not discharge effluents containing this product to sewage systems without the local building inspection or water permit.**

**CIRCULAR WATER:**

- **Purified DW is a strong oxidizing agent. It can attack cellulose, the organic matrix of any solid, contamination. May cause violent chemical reactions, fire and explosion. Clean up all chemical spills outside of local building inspection and building inspection. In case of chemical spills, avoid body contact and wear appropriate protective equipment.**

**USER SAFETY REQUIREMENTS:**

- **Follow manufacturer's instructions for cleaning/material PPE. If any such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Change clothing when contaminated and wash on-site. Do not allow contaminated clothing to dry before washing clothing on-site.**

- **Discard clothing and other absorbent materials that have been depleted or heavily contaminated with chlorine dioxide.**

- **User must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.**

- **User must wash hands immediately if possible gets inside. Then wash hands immediately with soap and use PPE. Do not allow contaminated clothing to dry before washing clothing on-site.**

**TOTAL:**

- **ACTION INGREDIENT:**

  - **Sodium Chlorite (NaClO4):** 40.0%.

**OTHER INGREDIENTS:**

- **60.0%.

**TOTAL:**

- **100.0%**