

Dioxi Kleen 15

Chlorine Dioxide and Acidified Chlorite Solution Precursor

ACTIVE INGREDIENT:

Sodium Chlorite.....	15%
Other Ingredients.....	85%
Total.....	100%

EPA Reg. No. 63838-21-81811

EPA Est. No. 63838-CA-01; 63838-AR-001

KEEP OUT OF REACH OF CHILDREN DANGER

FIRST AID

IF IN EYES	<ul style="list-style-type: none"> 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 for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Call a poison control center 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF INHALED	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
For 24 hour emergency information, call Chemtrec at 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

See back panel for additional precautionary statements

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER CORROSIVE: Causes irreversible eye damage and skin burns. Harmful if swallowed. Avoid breathing vapors. Do not get in eyes or clothing. Wear splashproof goggles, protective clothing, and rubber gloves when handling this product. Avoid breathing mists or fumes. Vacate poorly ventilated area as soon as possible. Do not return until strong odors have dissipated. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS:

This product is toxic to fish and aquatic invertebrates, oyster, and shrimp. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of the National Pollution Discharge System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS:

Strong oxidizing agent. This product becomes a fire or explosive hazard if allowed to dry. Mix only into water. Mixing with acids, alcohols, or other chemicals may cause evolution of chlorine and chlorine dioxide gas which is toxic and may be explosive. Combustible materials contaminated with this product may burn rapidly. Do not contaminate this product with garbage, dirt, organic matter, paint products, solvents, acids, vinegar, beverages, oils, pine oils, dirty rags, or other foreign matter. Do not expose to hot surfaces, sparks or open flame.

STORAGE AND DISPOSAL

Pesticide Storage: Do not contaminate water, food or feed by storage or disposal. Store upright in a cool, dry, and well-ventilated area away from heat or open flame. Keep product in tightly closed container when not in use. Do not allow liquid to dry because this could present a fire hazard. Store away from other chemical and combustibles. Do not skid or slide drums.

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 by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Emergency Handling: In case of contamination or decomposition, do not reseal container. Isolate in an open, well ventilated area. Flood with large volumes of water. If fire occurs, extinguish with large volumes of water. Cool unopened drums by water spray.

Procedure for Leak or Spill: Stop leak if this can be done without risk. Keep combustible and organic materials away. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state and Federal environmental laws, rules, regulations, standards, and other requirements.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling, if available. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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 a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Application Methods: This product is a precursor for the generation of chlorine dioxide. [Do not add this product directly to the system being treated] Chlorine dioxide solutions can be generated from this product by the following methods:

1. The chlorine method which utilizes this product with chlorine gas, or
2. The hypochlorite method which utilizes this product with a hypochlorite solution and an acid, or
3. The Acid-Chlorite method which utilizes this product and an acid, or
4. The electrolytic method which utilizes this product with sodium chloride, as needed.

Acidified sodium chlorite solutions can be generated by mixing this product with Generally Recognized As Safe (GRAS) acids such as citric, phosphoric, acetic acid, or sodium bisulfate for food processing applications. [In addition to the previously mentioned GRAS acids, a mineral acid such as, hydrochloric acid or sulfuric acid may be used for other industrial uses.] Add to a point in the system which ensures uniform mixing.

Your sales representative can guide you in the application techniques.

General Industrial Process Waters (Oilfield Injection water, White Water Paper Mill Systems, and Recirculating Cooling Towers):

Chlorine dioxide generated from this product can be used to control microbial slime. The required chlorine dioxide residual concentrations range between 0.25 and 5.0 ppm depending of the degree of microbiological contamination. The typical chlorine dioxide residual concentration range is 0.25-1.0 ppm (2-8 lbs per million gallons of water) for continuous dosing and 0.25-5.0 ppm (2-42 lbs. per million gallons of water) for intermittent dosing. Badly fouled systems must be cleaned before treatment.

Food Plants (Dairies, Bottling Plants, Breweries, Wineries and Food Processing Plants):

Chlorine dioxide generated from this product is effective for use in controlling non-public health related microorganisms in typical food processing water systems, such as flume water, chill water systems, hydrocoolers, and other water systems. The required dosages will vary depending on process conditions and the degree on contamination present. Apply this product through a chlorine dioxide generation system continuously or intermittently to achieve a chlorine dioxide residual concentration ranging from 0.25-3.0 ppm.

Water containing up to 3 ppm residual chlorine dioxide may be used for washing fruits or vegetables that are not raw agricultural commodities in accordance with 21 CFR 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.

Treatment of Irrigation Water Systems: Chlorine dioxide generated from this product is effective for use in controlling bacteria, algae and slime in irrigation piping and emitters for field and greenhouse/hothouse applications and is effective for use in controlling bacteria, algae, slime and to reduce nitrification in water reservoirs when applied continuously or with a slug dose. The typical chlorine dioxide residual concentration range is 0.25-2 ppm (2-16 lbs of chlorine dioxide per million gallons of water) for continuous dosing and 5-25 ppm (42-210 lbs of chlorine dioxide per million gallons of water) for slug dosing.

Enhanced Oil and Gas Exploration and Recovery Systems [(Including Primary, Secondary or Tertiary Oil and Gas Recovery, Plus Oil Sands Processing Waters)]:

Note: Addition of chlorine dioxide generated from this product must be made at the free water knockouts, before or after the injection pumps and injection well headers. For microbial control in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, the preferred method of addition is to use a chlorine dioxide specific generator.

For controlling bacteria; including sulfate-reducing and slime-forming bacteria, in oil and gas production systems.

For use in treating water for hydraulic fracturing.

Oil-field water treatment of fracturing, produced, disposal, outfall, injected, down-hole, and co-mingled waters.

Oil sands processing waters

Enhanced oil recovery systems and oil-field injection waters.

Disposal-well water.

Removing, controlling or preventing biofouling in oil and gas applications.

Chlorine dioxide generated from this product is effective in the remediation of bacterial contamination commonly found in oilfield production, injection, and disposal fluids. The required dosage and frequency will vary depending on severity of contamination, temperature and pH. The typical chlorine dioxide residual concentration range is 1.2-5.0 ppm for continuous dosing, above the chemical [chlorine dioxide] demand of the system, but may require up to 10.0 ppm chlorine dioxide.

Always inject or introduce the chlorine dioxide below the surface of the treated water/suspension/fluid/slurry, preferably while flowing or mixing.

Manufactured For: Meras Engineering, Inc., 2401 Orangeburg Avenue, Ste 675, Modesto, CA 95355

24 hr Emergency ChemTrec No.: 800-262-8200

UN 1908

DOT: Chlorite

Solution, 8, PGII

LOT #: Net contents: 52.85 gallons

33-QA08

Ver V3