# **DosOx**

## Chlorine Dioxide and Acidified Chlorite Solution Precursor

#### **ACTIVE INGREDIENT:**

(Equivalent to 4.5% chlorine dioxide)

EPA Reg. No. 63838-24-93526

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

## DANGER

#### **FIRST AID**

IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> </ul>
	<ul> <li>Rinse skin immediately with plenty of water for 15- 20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF INHALED	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	<ul> <li>Do not give anything by mouth to an unconscious</li> </ul>

person.

For 24 hour emergency information, call PERS No.: 800-633-8253. 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: This product becomes a fire or explosive hazard if allowed to dry. Highly corrosive causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or clothing. May be fatal if swallowed. Do not get on bare hands. Wear goggles or face shield and neoprene gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing at once to avoid a fire and wash separately before reuse. Avoid breathing furnes.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and other 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 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 treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### PHYSICAL AND CHEMICAL HAZARDS

DANGER: This product becomes a fire or explosive hazard if allowed to dry. Strong oxidizing agent. Mix or dilute into water only. Mixing with acids, alcohols, or other chemicals may cause evolution of chlorine and chlorine dioxide gas mixture which is toxic and may be explosive. Combustible materials contaminated with this product may burn rapidly. Keep handling areas and equipment clean and free of oils, greases, combustibles and dust. Do not contaminate 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

#### DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

Pesticide Storage: Store upright in a cool, dry, and well-ventilated place. Avoid excessive heat or freezing. Protect from contact with other chemicals; avoid storage with organic chemicals, acids, reducers and combustible material. Keep container tightly closed when not in use. Do not allow liquid to dry because this could present a fire hazard. If fire occurs, extinguish with large volume of water. Avoid exposure to high temperatures during storage. Store remote from other chemical and combustible material. 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.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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. Turn the container over onto its other end and tip 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. 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.

Container Handling: (Containers equal to or less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

#### **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
- 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.

## Drinking Water for Cattle, Swine, and Other Livestock To Control Non-pathogenic Bacteria, Taste and Odor in the Water Supply System:

- If the water supply is badly fouled, prepare a solution with 5 ppm available chlorine dioxide by adding 1.1 part of this product to 10,000 parts water (a 1:9000 dilution) (1 fl. oz. of this product per 71.0 gallons). Allow 15 minutes before delivery to livestock or poultry.
- If the water supply has heavy contamination, prepare a solution of 11 ppm available chlorine dioxide by adding 1.1 part of this product to 4,545 parts water (a 1.4091 dilution) (1 fl. oz. per 32.3 gallons). Allow 15 minutes before delivery to livestock or poultry.
- After 24 hours, reduce the addition rate to 1 ppm available chlorine dioxide by adding 1.1 gallons of this product to each 50,000 gallons of animal drinking water or cooling comfort water, provided the terminal concentration at the end of the waterline is not less than 0.5 ppm.
- 4. If the microbiological content of the water is eliminated by this rate of addition, the concentration of available chlorine dioxide can be reduced to 0.5 ppm (1.1 gallons of this product per 100,000 gallons of water). If the microbiological control is not adequate at 1 ppm available chlorine dioxide, add 1.5 ppm available chlorine dioxide to the drinking or cooling comfort water (1.1 gallon of this product per 33,333 gallons of water).
- Continuously treat the water from day one. Remove this product from drinking water 24 hours
  prior to vaccinations, then resume treatment 24 hours after vaccinations. Note: this product is
  not intended for use in human drinking water and treated water must not be made available for
  human consumption.

To Treat Drinking Water Supply for Cattle, Poultry, Swine and Other Livestock:

Use this product with a chlorine dioxide generator to generate an aqueous chlorine dioxide solution. Alternatively, the product can be mixed manually to generate an aqueous chlorine dioxide solution. The chlorine dioxide generator and manual mixing methods react this product with either a chlorine solution and acid or an acid. The generated chlorine dioxide solution can be added at a point in the system which ensures uniform mixing and distribution up to 5 pm of chlorine dioxide.

Carefully follow all instructions for the chlorine dioxide generator. Always prepare and use chlorine dioxide solutions in a well-ventilated area. Treat water continuously from day one. Remove this product from drinking water 24 hours prior to vaccination, then resume treatment 24 hours after vaccinations. Note: this product is not intended for use in human drinking water and treated water must not be made available for human consumption.

Manual Mixing Method A: :

- For a 5 ppm chlorine dioxide solution add 1.1 part of this product to 10,000 parts water (1 fl. oz.
  of this product per 71 gallons). Use more water for lower chlorine dioxide concentrations.
- 2. Add 2-5 ppm sodium hypochlorite; 3-8 parts of 12.5% bleach to 10,000 parts water.
- 3. Using an appropriate acid, add sufficient acid to lower the pH to 5.0-6.5.
- 4. Allow 15 minutes before delivery to livestock water lines.
- After 24 hours, the addition rate can be reduced to 1 ppm of available chlorine dioxide by adding 1.1 fl. oz. of this product to approximately 387 gallons of animal drinking water provided that the terminal concentration at the end of the water line is not less than 0.5 ppm.

#### Manual mixing Method B:

- Add 1.1 part of this product to 9 parts water.
- Activate by adding phosphoric, hydrochloric, acetic or other food grade acid to a pH of 2.5-3.5.
- 3. Mix and allow to stand for at least 15 minutes before delivery to livestock water lines.
- Dilute 1 part of the activated solution with 5,000-1,000 parts water for a 1-5 ppm chlorine digital solution.

Manufactured For: AQUAPPROACH LLC. 18 Park Place Dr. Gonzales, TX 78629 24 hr Transportation Emergency PERS No.: 800-633-8253





# DOT: UN1908.

### **Chlorite Solution, 8, PGII**

LOT #: Net contents: 470 lbs., 53.11 gals.

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