

### ACTIVE CHLORINE DIOXIDE SOLUTION

MOLD, MILDEW, BIOFILM CONTROLLER ODOR ELIMINATOR WATER DISINFECTANT BACTERICIDE/VIRUCIDE/ALGECIDE HOSPITAL USE BROAD SPECTRUM DISINFECTANT

#### **ACTIVE INGREDIENT**

Chlorine dioxide	0.05%
OTHER INGREDIENTS	99.95%
TOTAL	100.00%

DoxyKlor<sup>™</sup> contains 500 ppm (500 mg/L) chlorine dioxide



### no rinse formula

Kills 99.9%

of common bacteria and viruses on hard, nonporous surfaces

- Perfect for Process Water
- Non-Flammable
- No VOC
- Eliminates Odors
- Removes Mold/Mildew

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- Biofilm/Slime Control
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- @
- Industrial Use
- Commercial Use
- k <sup>·</sup>y

Manufactured for: PI Industries, Inc. 8275 S. Eastern Avenue, Suite #200-882 Las Vegas, NV 89123-2545

Net Contents: \_\_\_\_ Gal (\_\_\_\_ L)

Register under several US Patents \_\_\_\_\_

Lot#:\_\_\_\_\_ Mfg. Date: \_\_\_\_\_ Expiry Date: \_\_\_\_\_

Made in [the] USA

{End Front Panel}

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes moderate eye irritation if sprayed directly in eyes. Avoid contact with eyes, skin and clothing. Harmful if swallowed. Harmful if inhaled in large quantities. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Handlers applying chlorine dioxide in an occupational setting should wear gloves. Always work in a well-ventilated area and avoid inhaling (huffing) chlorine dioxide fumes.

Wear a half-face respirator with acid gas cartridge and N95 filter under the following conditions: if OSHA inhalation exposure limits of chlorine dioxide STEL are reached or exceeded when applying DoxyKlor, such as in enclosed spaces or poorly ventilated area, while a high-pressure sprayer, for an extended period of time or when normal work shift duties entail non-stop, uninterrupted periods of applying product with a mop, sponge or sprayer *https://www.osha.gov/chemicaldata/16*. Fruits and vegetables treated with chlorine dioxide must be blanched, cooked, or canned before consumption or distribution in commerce.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish and aquatic organisms in large quantities. 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.

PHYSICAL AND CHEMICAL HAZARDS: Chlorine dioxide is a strong oxidizing agent.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep containers tightly closed when not in use. Store in original container in a dark, dry place away from extremes of heat or freezing conditions. Do not store with easily oxidizable materials, acids, bases, or combustible materials. Do not freeze.

This product is to be used as directed within 9 months of the manufacture date indicated on the front panel of this label.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of pesticide, prepared solutions, or rinsate is a violation of Federal law. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of your nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container, Triple rinse container (or equivalent) promptly after emptying. [For product 5 gallons or less] 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 of 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 this procedure two more times. [For product containers greater than 5 gallons] Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full of 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 on its other 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. Then offer for recycling, or puncture and dispose of in a sanitary landfill or by incineration.

#### CAUTION: KEEP OUT OF REACH OF CHILDREN

Manufactured for: PI Industries, Inc. 8275 S. Eastern Avenue, Suite #200-882 Las Vegas, NV 89123-2545 EPA Reg. No.: 93113-2 NSF (Cat. D-2) Reg. No.: 165169

#### **USE INFORMATION:**

DoxyKlor is a specially designed formulation of chlorine dioxide and is a uniquely versatile bactericide. It cleans and treats microbial contamination in animal research facilities, food-processing and industrial waters, pulp and papermaking processing waters and cutting oils. It also disinfectants hard, non porous environmental surfaces in hospitals and institutions.

DoxyKlor can be used in federally inspected meat and poultry plants as a disinfectant on hard, non-porous surfaces.

DoxyKlor can be used to treat hard, non-porous surfaces in: hospitals, medical and dental offices, food processing facilities, bottling plants, breweries, meat-packing plants, poultry-processing plants, fish-processing plants, food storage areas, institutional kitchens, dairy and poultry farms and production facilities, a nimal research facilities, agricultural storage facilities (including containers, trailers rail cars, vessels and bins, animal transport vehicles and equipment, animal confinement and rearing facilities animal handling facilities, livestock facilities, hatcheries, hotels, business and office buildings, institutional facilities, public facilities.

DoxyKlor is an effective disinfectant on previously cleaned hard, non-porous surfaces with a contact time of 15 seconds to 10 minutes (depending organism type).

#### **DIRECTIONS FOR USE**

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

#### Hospital EHS and General Disinfection [Public Health Use]]

**To pre-clean:** Saturate surfaces with this product by spray then wipe surface clean using a [microfiber] mop, clean paper or cloth towel, allow to air dry. Repeat, if necessary, until surfaces are visibly clean.

**For use as a hard, non-porous surface disinfectant/virucide**<sup>†</sup>: Apply this product to pre-cleaned surfaces by spray at a distance of 4-6 inches. Allow surface to remain visibly wet for 10 minutes, then wipe using a [microfiber] mop, clean paper or cloth towel, allow to air dry. Discard or launder spent materials before reuse.

This product is not to be used as a terminal sterilant or high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter sterile areas of the body. This product may be used to pre-clean critical and semi-critical medical devices prior to sterilization or high-level disinfection.

#### **Agricultural Premises and Equipment**

#### VEHICLES:

Before treatment, all vehicles (containers, trailers, rail cars, vessels) must be cleaned with water to remove debris and dirt. Add DoxyKlor to water at a dose of 300 ppm (300 mg/L) chlorine dioxide (a dilution ratio 3 parts DoxyKlor: 2 parts water). Pour 2.5 quarts of diluted DoxyKlor into a foaming wand tank capable of delivering 4-6 gallons of water per minute. Allow surfaces to remain wet for at least 10 minutes.

#### ANIMAL DWELLINGS:

- 1) Remove all animals and feed from premises such as poultry houses, swine pens, calf barns and kennels.
- 2) Remove all litter and manure from premises of facilities.
- 3) Empty all troughs, racks and other feeding equipment/watering appliances.
- 4) Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5) Add DoxyKlor to water at a dose of 300-500 ppm (300 500 mg/L) chlorine dioxide (full strength or at dilution ratio 3 parts DoxyKlor: 2 parts water or non-diluted).
- 6) Using a commercial sprayer, saturate all surfaces with the diluted DoxyKlor. Allow surfaces to remain wet for at least 10 minutes. Immerse all halters, ropes and other types of equipment

used in handling and restraining animals as well as forks, shovels and scrapers used for removing litter and manure.

7) After treatment, ventilate buildings, coops or other enclosed spaces and allow to air dry.

#### ODOR AND MOLD CONTROL:

Before treatment, all vehicles or areas must be cleaned with water to remove debris and dirt. Add DoxyKlor to water at a dose of 300.0 ppm (300.0 mg/L) chlorine dioxide (a dilution ratio 3 parts DoxyKlor: 2 parts water). Pour 1 quart of diluted DoxyKlor into a foaming wand tank capable of delivering 4-6 gallons of water per minute. Allow surfaces to remain wet for at least 10 minutes.

#### Food Processing Plants, Food–Handling Establishments and Restaurants]

ICEMAKERS:

Ice making machinery should be disassembled and thoroughly cleaned using a suitable detergent followed by a potable water rinse. Add DoxyKlor to the incoming water line of the ice machine via a chemical feed pump or injector system at a dose of 20 ppm (20 mg/L) chlorine dioxide (dilution ratio of 1:25).

#### CANNING RETORT AND PASTEURIZER COOLING WATER:

All tanks, tunnels, conveyor chains, heat exchangers, heat exchange towers, lines, spray bars and nozzles should be thoroughly cleaned, when possible, and completely rinsed using clean, potable water prior to treatment. Add DoxyKlor to water systems, including the cooling or warming tanks or spray systems, towers, lines and all water containing parts of the system dose at start up, 5 ppm (5 mg/L) chlorine dioxide (dilution ratio of 1:100). To maintain the 5ppm (5 mg/L) chlorine dioxide concentration in the water system, a timed or electronically controlled chemical feed pump or injector system can be used for additions to the system or for treating the make-up water. Fresh DoxyKlor should be used daily.

#### STAINLESS STEEL TRANSFER LINES, HYDROCOOLERS AND PASTEURIZERS:

Clean equipment or line thoroughly using a suitable detergent followed by a clean, potable water rinse before treatment. Add DoxyKlor to potable make up water at a dose of 20 ppm (20 mg/L) chlorine dioxide (dilution ratio of 1:25) for each ten gallons of volume in lines and/or equipment. Mix and fill lines and equipment overnight. Drain and allow to air dry just prior to next run start-up.

#### Institutions, Animal Confinement Areas, and Veterinary Clinics

ANIMAL HOLDING ROOMS, SICK ROOMS, MORGUES AND WORK ROOMS:

Rooms to be deodorized must be in a clean condition prior to DoxyKlor application. Immerse, circulate, fill, wipe or spray to saturate all surfaces with DoxyKlor. Allow surfaces to remain wet for at least 10 minutes. After application, allow surfaces to air dry.

#### ODOR AND SLIME FORMING BACTERIA IN ANIMAL CONFINEMENT AREAS:

Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, cases and other facilities and fixtures occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with clean water. Immerse, circulate, fill, wipe or spray to saturate all surfaces with DoxyKlor. Allow surfaces to remain wet for at least 10 minutes. After application, allow surfaces to air dry.

### POULTRY HOUSES, SWINE PENS, CALF BARNS AND KENNELS AND FLABORATORY ANIMAL BREEDING AND RESEARCH QUARTERS:

Remove all animals and feed from premises, vehicles, enclosures, coops and crates. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. **To pre-clean:** Saturate surfaces with this product by spray then wipe surface clean using a [microfiber] mop, clean paper or cloth towel, or rinse surface using potable water and allow to air dry. Repeat, if necessary, until surfaces are visibly clean.

#### For use as a hard, non-porous surface disinfectant/virucide:

Apply this product to pre-cleaned surfaces by spray at a distance of 4-6 inches with clean [microfiber] towel. Allow surface to remain visibly wet for 10 minutes, allow to air dry. Discard or launder spent materials before reuse. D Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used for removing litter and manure. After treatment, ventilate buildings, coops or other enclosed spaces and allow to air dry. Repopulate when solution has dried.

# MOLD & MILDEW AND SLIME FORMING BACTERIA ON WALLS, FLOORS, CEILINGS, BINS, BOXES, PENS, BARNS, KENNELS AND OTHER ANIMAL HEALTH SURFACES

Remove animals and feed from area to be treated. Thoroughly clean all surfaces with soap or detergent and rinse with clean water. Immerse, circulate, fill, wipe or spray to saturate all surfaces with DoxyKlor. Allow surfaces to remain wet for at least 10 minutes. After application, allow surfaces to air dry. After spraying, the area must be opened and airedbefore repopulating. Repeat as needed.

#### Human Drinking Water Systems

# CONTROL SLIME AND ODOR CAUSING BACTERIA AND ENHANCE THE TASTE OF STORED POTABLE WATER

1. Prior to treatment of potable water, thoroughly clean and disinfect the water storage system to ensure a sanitary condition. Thoroughly rinse with clean, potable water.

2. Potable water must be treated at a rate of one part of DoxyKlor per 100 parts potable water (5 ppm available chlorine dioxide) and may be injected or batch treated.

3. Water storage tank must be sufficiently sealed to prevent outside contamination and direct sunlight. Using a test kit, confirm the chlorine dioxide to be 5 ppm and check to see this level does not fall below 1 ppm.

#### REMOVE OFF-ODORS AND TASTES FROM MUNICIPAL WELL WATERS

 Inject DoxyKlor into the incoming water main using a chemical proportioning pump, or injector, at a rate of 1 part DoxyKlor per 500 parts water (1 ppm available chlorine dioxide).
Check the DoxyKlor levels weekly.

#### **Industrial Processes and Water Systems**

COMMERCIAL WATER FILTRATION SYSTEMS, SAND BEDS, GRAVEL BEDS, CHARCOAL FILTERS AND COOLING WATER SYSTEMS.

Filters:

1. Carefully back-flush filters with potable water, where possible, to remove any accumulated solid residue and contamination.

2. Fill system with potable water and adjust pH to 6.0 with citric acid, phosphoric acid, or acetic acid (vinegar) or equivalent.

3. Add 3 parts of DoxyKlor per 2 parts of (300 ppm of available chlorine dioxide) of filter system volume to the access hatch and circulate the system for 1 hour. Check the pH and bring back to 6.0 if it has drifted. Bring the available chlorine dioxide concentration back to 300 ppm.

4. Circulate the solution for 1 additional hour, discharge and then water wash for 30 minutes with potable water.

ENCLOSED AND RECIRCULATING COOLING WATER SYSTEMS:

1. Add 25-100 gallons of DoxyKlor per 10,000 gallons of cooling water (5-20 ppm of available chlorine dioxide) every week.

2. Depending on the degree and type of contamination, addition frequency may be reduced to every

2-3 weeks when contamination is under control.

PREVENT CORROSION AND SLIME BACTERIA IN OIL WELLS DURING SECONDARY RECOVERY OPERATIONS

1. Prepare a working solution of 5,000 ppm of available chlorine dioxide by diluting each gallon of DoxyKlor used to 4 gallons of solution with the injection water.

2. Proportion 1 part of the above solution into each 150 parts of reinjected acidified (3.0 - 4.0 pH) water.

3. Monitor microbial content of the water and increase or decrease the addition rate of the working solution as necessary.

#### **Residential and Public Access Areas**

RESTROOMS/BATHROOMS, REFUSE CONTAINERS, DIAPER PAILS, STORAGE LOCKERS:

Thoroughly clean all surfaces before treatment. Add DoxyKlor to water to make a solution of 50 ppm (50 mg/L) chlorine dioxide (dilution ratio of 1:10). Spray the diluted DoxyKlor using a suitable spraying device onto walls, ceilings, floors, and surfaces, until lightly damp. Allow surfaces to air dry. Ventilate enclosed spaces. Treat as required.

#### Swimming Pools, Hot Tubs & Spas

MAINTENANCE:

Add DoxyKlor to swimming pools and hot tub waters to make the chlorine dioxide 1 ppm (1 mg/L)-5 ppm (5 mg/L0 (dilution ratio of 1:500 – 1:100). Maintain the swimming pool water pH from 7.2 to 7.6.]

SLIME / BIOFILM:

DoxyKlor may also be used at 50 ppm for shock treatment to dislodge slime and biofilm. Remove all chunks of slime/biofilm and retreat until no visible slime/biofilm remains.

#### CONDITIONS OF SALE AND WARRANTY

PI Industries, Inc., its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use.

TO THE EXTENT PERMITTED BY LAW, PI INDUSTRIES, INC. DOES NOT MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS. Kills 99.9% of common household bacteria – and/or – viruses on treated hard, nonporous surfaces

Perfect Solution for Food Processing Water Institutional Use Non-Flammable Eliminates Stains and Odors caused by Mold and Mildew Biofilm Busting Slime Remover

#### **Emerging Viral Pathogens Claims**

This product qualifies for emerging viral pathogen claims per the EPA's 'Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens not on EPA Registered Disinfectant Labels' when used in accordance with the appropriate use directions indicated below.

This product meets the criteria to make claims against certain emerging viral pathogens from the following viral category[ies]:

• Enveloped Viruses

For an emerging viral pathogen that is a/an	following the directions for use for the following supporting organism(s) on the label:
Enveloped virus	Adenovirus [Adenovirus 5] [Adenoid 75 strain]

[Product Name] has demonstrated effectiveness against viruses similar to [name of emerging virus] on hard, non-porous surfaces. Therefore, [Product Name] can be used against [name of emerging virus] when used in accordance with the directions for use against [name of supporting virus(es)] on hard, nonporous surfaces. Refer to the [CDC or OIE] website at [pathogen-specific website address] for additional information.

[Name of illness/outbreak] is caused by [name of emerging virus]. [Product Name] kills similar viruses and therefore can be used against [name of emerging virus] when used in accordance with the directions for use against [name of supporting virus(es)] on hard, no on-porous surfaces. Refer to the [CDC or OIE] website at [website address] for additional information.

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