



THE
PHARMA-ROOM
SURFACE WASH



THE PHARMA ROOM: SURFACE WASH TECHNICAL DATA SHEET

THE PHARMA ROOM: **SURFACE WASH**

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Terminal sanitizing of surfaces such as tanks, transfer lines, hard non-porous food contact surfaces, food and beverage processing equipment conforming to 40 cfr 180.940(b) and (c).

- Remove food particles and soil by using a pre-flush, pre-scrape, or pre-soak treatment.
- Clean tanks, lines, or surfaces thoroughly using suitable detergent; rinse with clean portable water.
- Wear appropriate personal protection equipment.
- Prepare a 50 to 250 PPM chlorine dioxide working solution.
- Fill, flush, immerse, circulate, or spray tanks, lines, processing equipment, or food-contact surfaces with the solution, making sure that surfaces remain thoroughly wet for at least one minute.
- After sanitizing, drain tank, line or equipment and allow to air dry.

Odor, slime and microbial control of food-processing water systems: flume transport, chill water and water cooling/warming systems.

- Make sure that materials in system components such as water pumps and nozzles are compatible.
- Clean and rinse system with potable water.
- Wear appropriate personal protection equipment.
- Prepare a sufficient volume of 5 PPM chlorine dioxide working solution.
- Fill system with solution and circulate. For better results let stand overnight.
- Drain and rinse with potable water before use.

Odor, slime and microbial control of membrane systems: systems and food and beverage processing.

- Make sure that materials in system components are compatible.
- Rinse system with potable water.
- Wear appropriate personal protection equipment.
- Prepare sufficient volume of chlorine dioxide solution suitably diluted for specific application..
- Fill system with solution and circulate. For better results let stand overnight.
- Drain and rinse with potable water before use.

Sanitization rinse of food contact surfaces, storage and utensils.

- Remove gross particles and soil using suitable detergent, followed by potable water rinse.
- Wear appropriate personal protection equipment.
- Prepare a working solution at 100 to 250 PPM chlorine dioxide.
- Flush (min.1 min.), spray or wipe baskets, bins, utensils or food contact surfaces with solution.
- Allow to air dry.
- Do not reuse solution.

Sanitization of processing equipment and non-food contact surfaces in dairies, breweries, wineries and bottling plants.

- Remove gross particles and soil using suitable detergent, followed by potable water rinse.
- Wear appropriate personal protection equipment.
- Prepare up to 500 PPM chlorine dioxide working solution.
- Fill and circulate, immerse, spray or wipe equipment according to requirements of target application.
- Special attention must be paid to hard to reach areas such as pipes and closed vessels to ensure contact with the solution.
- Make sure all surfaces remain thoroughly wet for at least 1 minute.
- Drain and air-dry treated equipment.
- Do not rinse.
- Do not reuse solution.

Terminal food-contact surfaces sanitizer rinse in poultry, meat and fish processing plants, dairies, breweries and bottling plants conforming to 21 cfr 178.1010(b)(34) and (c)(39).

- Remove gross particles and soil using suitable detergent, followed by potable water rinse.
- Wear appropriate personal protection equipment.
- Prepare up to 250 PPM chlorine dioxide working solution.
- Spray or wipe solutionj on equipment and surfaces.
- Special attention must be paid to hard-to-reach areas such as pipes and closed vessels to ensure contact with the solution.
- Make sure all surfaces remain thoroughly wet for at least 1 minute.
- Air-dry treated surfaces.
- Do not rinse.
- Do not reuse solution.

New bottle and container sanitizing spray rinse CIP equipment.

- Wear appropriate personal protection equipment.
- Prepare up to 250 PPM chlorine dioxide working solution.
- Ensure adequate ventilation suitable for misting operations.
- Connect working solution appropriately into CIP equipment setup.
- Configure spray parameters for minimum solution spray time of 15 seconds.
- Ensure rotation of containers or bottles to drain excess solution.
- Air-dry treated surfaces.
- Do not rinse.
- Do not reuse solution.

Disinfection / sanitization of non-porous, hard surfaces such as walls, ceilings, tiles, floors, windows and tables.

- Remove gross particles and soil using suitable detergent, followed by potable water rinse.
- Wear appropriate personal protection equipment.
- Prepare a working solution up to 250 PPM chlorine dioxide.
- Apply using a suitable and clean sprayer, sponge, or mop, making sure that surfaces remain thoroughly wet for at least 10 minutes.
- Wipe dry, or allow to air dry.
- Do not reuse solution.

Treatment of potable water for human consumption.

- Conforming to EPA regulation 40 CFR 141.65(a), maximum allowed level for residual chlorine dioxide in drinking water is 0.8 PPM.
- Conforming to EPA regulation 40 CFR 141.64(a), maximum allowed level for chlorite ion (main chlorine dioxide by-product) in drinking water is 1.0 PPM.
- Wear appropriate personal protection equipment.
- Add this product to drinking water intended for human consumption at a rate of 2.0 PPM chlorine dioxide per gallon according to the dilution chart provided.
- Stir gently and wait 10 minutes before drinking.
- The use of a residual disinfectant test-kit is highly recommended to ensure regulatory compliance.

Sanitization and deodorization of healthcare, nursing and morgue facilities.

- Rooms must be thoroughly cleaned prior to treatment.
- Wear appropriate personal protection equipment.
- Prepare a working solution of 50 to 1000 PPM chlorine dioxide.
- Lightly dampen walls, windows, ceilings, floors and other hard surfaces using a suitable sprayer device, sponge, or mop to apply solution.
- Allow to air dry and ventilate area before its reuse.

Control and prevention of algae, fungi, bacteria, slime, mildew and biofilm contamination in agricultural and horticultural storage areas, work areas, tools, benches and walkways.

- Remove gross particles and soil using suitable detergent, followed by potable water rinse.
- Wear appropriate personal protection equipment to manipulate and apply solution.
- Prepare a 50 to 250 PPM chlorine dioxide working solution.
- Apply using a clean sprayer device, sponge, or mop, making sure that surfaces remain wet for at least 10 minutes.
- Immerse tools in sanitizing solution making sure they remain wet for at least 10 minutes.
- Do not reuse solution.

Treatment of water for animal consumption.

- Wear appropriate personal protection equipment.
- Add this product to animal drinking water at a rate of 3 to 5 PPM chlorine dioxide per gallon.
- Stir gently and wait 10 minutes before offering treated water to animals.

Sanitization of animal confinement, rearing and holding facilities.

- Remove all animals and feed from facilities.
- Remove gross particles, manure, debris and any other organic residues.
- Empty all feeding and watering appliances.
- Thoroughly clean walls, floors, ceilings, chutes, troughs, racks, enclosures, surfaces and fixtures using suitable detergent, followed by water rinse.
- Wear appropriate personal protection equipment.
- Prepare a working solution up to 500 PPM chlorine dioxide.
- Apply solution using a suitable sprayer device, making sure that surfaces remain thoroughly wet for at least 10 minutes.
- Immerse-treat restraining and handling equipment, as well as cleaning tools, making sure they remain wet for at least 10 minutes.
- Allow to air-dry and ventilate area before reintroducing animals.

Sanitization of animal transport conveyances, rail cars, trailers and vessels.

- Clean conveyances with high-pressure wash and suitable detergent.
- Wear appropriate personal protection equipment.
- Prepare a working solution of 250 to 500 PPM chlorine dioxide.
- Apply solution using a suitable sprayer device or wipe onto surfaces with clean cloth, making sure that surfaces remain thoroughly wet for at least 10 minutes.
- Allow to air-dry.

Control of odor and slime build-up in animal confinement facilities*

- Remove animals and feed from facilities.
- Remove gross particles, manure, debris and any other organic residues.
- Thoroughly clean surfaces using suitable detergent, followed by water rinse.
- Wear appropriate personal protection equipment.
- Prepare a working solution at 1000 PPM chlorine dioxide.
- Apply using a clean sprayer device, sponge, or mop, making sure that surfaces remain wet for at least 10 minutes.
- Allow to air-dry and ventilate area before reintroducing animals.

Treatment of indoor swimming pools, hot tubs and spas.

- Restrict use of pool, hot tub or spa during treatment.
- Wear appropriate personal protection equipment.
- Add product to pool water at a rate of 1 - 5 PPM chlorine dioxide per gallon.
- For best results, apply and let stand overnight.
- In morning, circulate water to flush lines and pipes, remove biofilm debris from water.
- Adjust pool water pH within 7.2 – 7.6 range.
- Treat as required.

Slime and algae control in ornamental pools and spray fountains.

- Do not use this product if fish, or other aquatic species are kept in pool.
- Wear appropriate personal protection equipment.
- Add this product to pool water at a rate of 10 PPM chlorine dioxide per gallon.
- Circulate water.
- For better results apply and let stand overnight.
- Drain pool and refill with clean water.
- To prevent slime build-up, add product at a rate of 5 PPM chlorine dioxide per gallon.
- Treat as required.

Sanitization of water tanks of recreational vehicles, boats and aircraft.

- Drain tank and remove sediments.
- Scrub tank using a suitable detergent and thoroughly flush with potable water.
- Wear appropriate personal protection equipment.
- Prepare a 500 PPM chlorine dioxide working solution.
- Fill tank with the sanitizing solution and bleed air out of lines.
- Allow solution to remain in tank for at least 10 minutes.
- Drain and thoroughly flush with potable water.
- Refill tank with potable water.
- Do not reuse solution residue.
- Discard effluent in accordance to current federal and local regulations.
- Treat as required.

Treatment of potable water in tanks of recreational vehicles, boats and aircraft.

- Conforming to EPA regulations 40 CFR 141.65(a), maximum allowed level for residual chlorine dioxide in drinking water is 0.8 PPM
- Conforming to EPA regulations 40 CFR 141.64(a), maximum allowed level for chlorite ion (a chlorine dioxide by-product) in drinking water is 1.0 PPM
- Wear appropriate personal protection equipment.
- Add this product to drinking water tanks at a rate of 2.0 PPM chlorine dioxide per gallon.
- Stir gently and wait 10 minutes before drinking.

Sanitizing of horticultural drip irrigation and spray bar emitters*

- Wear appropriate personal protection equipment.
- Prepare a 1000 TO 2000 PPM chlorine dioxide working solution.
- Fill and circulate through system linked to water flow. Volume will vary according to size of system.
- Do not rinse.
- Do not reuse solution.

Industrial fogging applications*

Handheld foggers are recommended over stationary foggers to reach more surfaces, while changing the angle of applications in order to minimize missing surface contact in crevices shadow areas.

- Wear appropriate personal protection equipment including protective clothing, gloves, face shield and goggles, and NIOSH/MSHA approved respirator.
- Prepare a 400 TO 1000 PPM* chlorine dioxide working solution.
- Let dwell wet on surface for at least 10 minutes.
- Do not rinse. Let air dry.
- Close doors and windows to room or vehicle. Prohibit entry of unauthorized personnel and persons not wearing appropriate PPE into treatment area during fogging. Prevent re-entry for one hour. Open doors and windows to ventilate area prior to re-entry.

DILUTION CHART FOR THE PHARMA ROOM: SURFACE WASH (500 PPM) TO MAKE 2 GALLONS OF DILUTED PRODUCT

CONCENTRATION	STRENGTH	ADD THIS MUCH WATER	TO THIS MUCH SURFACE WASH
10 PPM	2%	251 oz	5 oz
50 PPM	10%	230 oz	26 oz
100 PPM	20%	205 oz	51 oz
200 PPM	40%	153 oz	102 oz
250 PPM	50%	128 oz	128 oz
300 PPM	60%	102 oz	153 oz
500 PPM	100%	Full Concentration - Do not dilute	