

Application / Dosing
of
Chlorine Dioxide in different site

Use Site	Formulation/ EPA Reg No.	Method of Application	Application Rate/ No. of applications	Use Limitations
Agricultural premises and equipment				
Agricultural Storage Facilities (Containers, Trailers, Rail Cars, Vessels)	Soluble Concentrate 9150-11	Foaming Wand	One quart to system that delivers 4-6 gallons per minute of dilution water 10 minutes contact time	Preclean with water to remove debris and dirt.
Mushroom Facilities: (food Contact) Stainless Steel Tanks, Transfer Lines, On-line Equipment, Picking Baskets	Soluble Concentrate 9150-2, 9150-3 9804-1, 58300-16, 58300-19	Flush equipment with sanitizing solution	Use-solution calls for 100-200 ppm total available chlorine dioxide	Clean equipment and surfaces thoroughly using a suitable detergent and rinse with water before sanitizing.
Mushroom Facilities (non-food contact): disinfect walls ceilings and floors	Soluble Concentrate 9150-2, 9150-3 9804-1, 58300-16, 58300-19	Spraying device	300-500 ppm total available chlorine dioxide 1,000 ppm for control of mold and slime on walls	Remove all gross filth from areas prior to disinfection. Never reuse activated solutions Avoid contact with food or food contact surfaces.
Potato Facilities: (food Contact) Stainless Steel Tanks, Transfer Lines, On-line Equipment, Handling equipment	Soluble Concentrate 9804-1	Fill, flush, immerse or spray	Use-solution calls for 100 ppm total available chlorine dioxide	None stated
Potato Facilities: walls, ceilings floors, planting and harvesting equipment and truck beds	Soluble Concentrate 9804-1	Spray	10 minute contact time	Always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide.

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Disinfection				
Potato Facilities: potato rinse tanks, flumes and lines	Soluble Concentrate 9804-1	Chemical Feed pump or injector system	5 ppm	After Treatment Potatoes must be rinsed with potable water.
Potato Storage: Potato rinse and humidification water	Soluble Concentrate 9804-5 9150-12	Spray, mist and fogger	200 to 400 ppm	No more than 20 gallons of product concentrate per month to humidification water per 500 tons of potatoes in storage. Always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide.
Disinfection of Animal Confinement Facilities (Poultry Houses, Swine Pens, Calf Barns and Kennels)	Soluble Concentrate 9150-2, 9150-3 9804-1	Use Commercial Sprayer to saturate all surfaces	Working Solution containing 300 to 500 ppm available Chlorine Dioxide	Remove all animals and feed from premises. Remove all litter and manure from premises of facilities. Empty all troughs , racks and other feeding equipment/ watering appliances. Thoroughly clean all surfaces with soap and detergent and rinse with water.
	Soluble Concentrate 9150-11	None Stated	1000 ppm	Remove all animals, bedding, litter, droppings and manure. Pre-clean
Animal Transport Vehicles	Soluble Concentrate 9150-11	Foaming Wand	One quart to system that delivers 4-6 gallons per minute of dilution water 10 minutes contact time	Preclean with water to remove debris and dirt.
Control for odor and Slime forming Bacteria in Animal Confinement Facilities	Soluble Concentrate 9150-2, 9150-3	Commercial sprayer to saturate all surfaces	1,000 ppm	Remove all litter and manure from premises and thoroughly clean all surfaces with soap or and rinse with clean water clean water

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Shoe Bath	Soluble Concentrate	Immersion	1 to 2 ounces per galloon of water	Change Shoe bath solution daily or when solution appears soiled.
Poultry House Disinfection: Poultry Chiller Water/ Carcass spray	Soluble concentrate 9150-2, 9150-3	Dip Carcass	0.5 to 3 ppm for Chiller Water 70 ppm for Carcass Spray	None stated
Poultry Drinking Water	Soluble concentrate 9150-2, 9150-3	Add to water	5ppm for fouled water 0.5 to 1.0ppm for control	None stated
Egg Room/ Hatching Area Incubator Room Tray Washing Room and Loading Platform	Soluble Concentrate 9150-2, 9150-3	High pressure sprayer	20 ppm for pre wash w/ sprayer 390 ppm to preclean floors 1,000 ppm treatment w/ fogger	None Stated
	10589-3	Spray	5 oz. per gallon/ 1406 ppm (mixed with DDAC)	Remove gross filth and heavy soil prior to application of the disinfecting solution
Chick Room, Chick Grading Box an Sexing room	Soluble concentrate 9150-2, 9150-3	Fogger, Mop	1,000 ppm w/ fogger 390 ppm to mop floors	None Stated
Hand Dip for Poultry Workers	Soluble concentrate 9150-2, 9150-3	Dip	50 ppm	None Stated
Horticulture uses Work Area and Benches	Ready to use Solution 9150-11	Cloth, mop, sponge or sprayer	9 fl oz per gallon/ 253 ppm	Do not Apply directly to Plant Material

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Horticulture uses Pots and Flats	Ready to use Solution 9150-11	Soak	18 fl oz per gallon/ 506 ppm	Remove all loose soil and plant residue prior to application
Horticulture uses Cutting Tools	Ready to use Solution 9150-11	Soak	9 fl oz per gallon/ 253 ppm	None Stated
Horticulture uses Bulbs	Ready to use Solution 9150-11	Soak	9 to 18 fl oz per gallon/ 253 ppm to 506 ppm	None Stated
Horticulture uses Greenhouse Glass, Walkways and under Bench Areas	Ready to use Solution 9150-11	Spray	4 to 9 fl oz per gallon/ 112 ppm to 253 ppm	None Stated
Evaporative Coolers	Ready to use Solution 9150-11	Add to water	4 to 9 fl. oz per gallon / 112 ppm to 253 ppm. Repeat as needed or every 14 days	None Stated
Rention Basins and Ponds	Ready to use Solution 9150-11	Add to Basin	4-9 fl oz. per 100 gallons/ 2 to 5 ppm	Do not use where fish are present
Decorative Pools, Fountains and Water Displays	Ready to use Solution 9150-11	Add to Pools	9-18 fl oz per 100 gallons/ 5 to 10 ppm	Do not use where fish are present.
Food handling/ storage establishments premises and equipment				
Food Processing Plants (Poultry, Meat, Fish) Food Contact Surface Sanitizer	Soluble Concentrate 9150-2, 9150-3 9804-9 9804-1	1 minute contact time	200ppm- 1,000 ppm total available chlorine Dioxide 50 ppm 100 ppm	Preclean and rinse equipment. Do not reuse solution. Do not rinse treated surface

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Food Processing Plants (Poultry, Meat, Fish) Non-Food contact disinfectant	Soluble Concentrate 9804-9 9804-1	Spray thoroughly wet for 10 minutes	500 ppm	Never reuse activated solutions
	Soluble Concentrate 10589-3	Spray	5 oz. per gallon/ 1406 ppm (mixed with DDAC)	Remove gross filth and heavy soil prior to application of the disinfecting solution
Dairies, Breweries and Bottling Plants Non-Food contact disinfectant	Soluble Concentrate, Ready to use Solution 9804-9 9804-1	Spray thoroughly wet for 10 minutes	500 ppm	Never reuse activated solutions
Dairies	Soluble Concentrate 10589-3	Spray	5 oz. per gallon/ 1406 ppm (mixed with DDAC)	Remove gross filth and heavy soil prior to application of the disinfecting solution
Dairies, Breweries and Bottling Plants Food Contact Surface Sanitizer	Soluble Concentrate, Ready to use Solution 9150-2, 9150-3 9804-9 9804-1	1 minute contact time	200ppm- 1,000 ppm total available chlorine Dioxide 50ppm 100ppm	Preclean and rinse equipment. Do not reuse solution. Do not rinse treated surface
Ice Making Plants and Machinery	Soluble Concentrate, Ready to use Solution 9804-9	Chemical Feed Pump or Injector System	20 ppm	

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	9804-1 9804-5			
Lube Additive for Moving Conveyors and Chains	Soluble Concentrate, Ready to use Solution 9804-9 9804-1	Inject into distribution system	10- 20 ppm	Preclean and sanitize all conveyor surfaces and associated structures
Canning Retort and Pasteurizer Cooling Water	Soluble concentrate, Ready to use Solution 9150-2, 9150-3 9804-9	Controlled Chemical Feed Pump	5ppm	
Stainless Steel Transfer Lines, Hydrocoolers and Pasteurizers	Soluble concentrate, Ready to use Solution 9150-2, 9150-3 9804-9 9804-1	Mix and fill lines and Equipment overnight	20 ppm	Preclean equipment or line thoroughly
Process Water for Vegetable Rinses, Tanks Lines	Soluble Concentrate 9150-2, 9150-3 9804-1	Chemical Feed Pump or injector system	5 ppm	Preclean all tanks, flumes and lines with suitable detergent.
Fruit and Vegetable Rinse	Soluble concentrate 9150-2, 9150-3 9804-1	Immersion	1/3 fl. to 1 gallon of water per 25 gallons of water 5 ppm	Prewash whole fruits and vegetables with clean potable water.

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Human Water Systems				
Potable Drinking Water	Ready to Use solution 59055-1	Metering Pump 1 mg/ liter (1ppm) or less 1 gallon per 100,000 gallons of treated water	1 mg/ liter (1ppm) or less 1 gallon per 100,000 gallons of treated water	None Stated
		1 mg/ liter (1ppm) or less 1 gallon per 100,000 gallons of treated water		
	9150-2, 9150-3 9804-1 9804-5, 9150-9	None stated	5 ppm	None stated
Water Storage systems aboard Aircraft Boats, RV's Off-shore Oil Rigs	Soluble concentrate 9150-2, 9150-3 9804-1	Add to tank and lines	50 to 500 ppm available chlorine dioxide	None stated
Municipal Well Waters	9150-2, 9150-3	None stated	1 ppm	None stated
Commercial water filtration systems	9804-1	Add to system	300 ppm	None Stated
Commercial, institutional and industrial premises and equipment				
Dental Offices Dental Pumice Disinfectant	Soluble Concentrate 9150-3	Apply to Dry Pumice	500 ppm	Discard 5 days after preparation
Hospitals and Nursing Homes Institutions and Public Places	Soluble Concentrate 10589-3,	Spray	1000 ppm to 1406 ppm (mixed with DDAC)	Remove gross filth and heavy soil prior to application of the disinfecting solution

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General disinfectant	9150-11 9804-1			
Hospitals, Laboratories and Institutions Hard Non Porous surfaces (Tile Floors, Walls and Ceilings and Stainless Steel Cold Rooms)	Soluble Concentrate 9150-2, 9150-3 9804-1	Spray, Mop or sponge	Working Solution containing 300 to 500 ppm available Chlorine Dioxide	Clean all surfaces with a suitable detergent and rinse with water prior to disinfection.
Disinfection of Bench Tops, Biological Hoods, Incubators, Stainless Steel Equipment and Instruments	Soluble Concentrate 9150-2, 9150-3 9804-1	Squirt onto surfaces with squeeze bottle	Working Solution containing 300 to 500 ppm available Chlorine Dioxide	Clean all surfaces with a suitable detergent and rinse with water prior to disinfection.
Water Bath Incubator	Soluble Concentrate 9150-2, 9150-3 9804-1	Pour solution into waterbath reservoir	Working Solution containing 300 ppm available Chlorine Dioxide to disinfect 50 ppm for order and slime control	Clean reservoir with a suitable detergent and rinse with water prior to disinfection
Sterilization of Spent Biologicals in Steam Autoclaves	Soluble Concentrate 9150-2, 9150-3	Spray or pour directly into autoclave buckets	Working Solution containing 1,000 ppm available Chlorine Dioxide	None Stated
To Deodorize Animal Holding Rooms, Sick Rooms, Morgues and	Soluble Concentrate	Spray solution on to walls ceilings and	Working Solution containing 1,000 ppm available Chlorine	Rooms to deodorize should be in a clean condition prior to autoclaving.

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Work rooms	9150-2, 9150-3 9804-1	floors	Dioxide	
Industrial Processing Plants	Soluble Concentrate 10589-3	Spray	5 oz. per gallon/ 1406 ppm	Remove gross filth and heavy soil prior to application of the disinfecting solution
Deodorizer- Hospitals, Restaurants, Hotel & Motel Rooms	Ready-to Use 9804-3	Spray	Spray area until covered with mist and let stand for 10 minutes	None stated
Swimming Pools				
Swimming Pools	Ready to use solution 59055-1	Meetering Pump	1 to 5ppm at a pH range from 7.2-7.6	None Stated
Residential and Public Access				
Odors on Pets, Litter Boxes, Carpets and Concrete Floors	Soluble concentrate 9150-2, 9150-3 9804-1	Soak, Mop or rinse	For litter boxes: 625 – 650ppm For carpets: 500 ppm Concrete floors: 1250 ppm Animal Baths: 80-100 ppm	Avoid direct contact with animal's eyes, nose and ears
Ice Fishing in the Round Treatment	Soluble Concentrate 9150-2, 9150-3	None stated	20 ppm	None stated
Deodorizer- Restrooms/Bathrooms,	Ready-to Use	Spray	Spray area until covered with mist and let stand	None stated

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Refuse Containers, diaper Pails, Storage Lockers	9804-3		for 10 minutes	
Industrial Processes and Water Systems				
Water Cooling systems	Ready to Use, Soluble concentrate 59055-1 9804-9 9804-1	Batch load or meter	100 ppm 5.0 ppm	None Stated
Recirculating Cooling Water systems	Soluble concentrate, Ready to use Solution 9150-2, 9150-3 9804-9	None stated	5-20 ppm	None stated
Water Based Cutting Oils	Soluble Concentrate 9150-2, 9150-3	Slug does system	32 oz to 10 gallons per million gallons of cutting oil	None stated
Paper Mills	Soluble Concentrate, Ready to use Solution 9150-2, 9150-3 9804-9, 9804-1	None stated	4.5 gallons product per 100 tons of paper 1.25 – 5.0 ppm (3.2 – 12.8 fluid ounces per 1,000 gallons of water	None stated
Oil Wells : Secondary	Soluble	None Stated	5,000 ppm available	None stated

Use Site	Formulation/ EPA Reg No.	Method of Application	Application Rate/ No. of applications	Use Limitations
Recovery Operations	Concentrate 9150-2, 9150-3		chlorine dioxide	
Once Through Water Cooling Systems	Soluble Concentrate 9150-2, 9150-3	Slug and Continuous	Slug Dose: 5-25 ppm Continuous Dose: 0.25 to 2.0 ppm	None Stated
Ventilation systems	Soluble concentrate 9804-1	Spray or fog	500 ppm. 10 minute contact time	NIOSH/MSHA approved respirator required

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Agricultural premises and equipment				
Mushroom Facilities: (food Contact) Stainless Steel Tanks, Transfer Lines, On-line Equipment, Picking Baskets	Soluble Concentrate/ Ready to Use Solution 5382-46 58300-17 74602-2	Flush equipment with sanitizing solution	Use-solution calls for 100 ppm total available chlorine dioxide	Clean equipment and surfaces thoroughly using a suitable detergent and rinse with water before sanitizing.
Mushroom Facilities (non-food contact): disinfect walls ceilings and floors	Soluble Concentrate/ Ready to use Solution 5382-46 58300-17 69151-5 74602-2	Spraying device	500 ppm total available chlorine dioxide 1,000 ppm for control of mold and slime on walls	Remove all gross filth from areas prior to disinfection. Never reuse activated solutions Avoid contact with food or food contact surfaces.
Potato Facilities: (food Contact) Stainless Steel Tanks, Transfer Lines, On-line Equipment, Handling equipment	Soluble concentrate: 53345-20, 56485-4	Fill, flush, immerse or spray	Use-solution calls for 100 ppm total available chlorine dioxide	None stated
Potato Facilities: potato rinse tanks, flumes and lines	Soluble concentrate: 53345-20, 56485-4, 9150-7	Chemical Feed pump or injector system	5 ppm	After Treatment Potatoes must be rinsed with potable water.
Potato Storage: Potato rinse and humidification water	Soluble concentrate: 53345-20, 56485-4,	Spray, mist and fogger	200 to 400 ppm	No more than 20 gallons of product concentrate per month to humidification water per 500 tons of potatoes in storage.

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	21164-21			Always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide.
Disinfection of Animal Confinement Facilities (Poultry Houses, Swine farrowing pens, Calf Barns and Kennels)	Soluble Concentrate 70060-18, 45631-23, 74602-2, 70060-6, 74602-3, 70060-19, 69151-5, 8714-8	Mop, sponge or Use Commercial Sprayer to saturate all surfaces	Working Solution containing 300 to 500 ppm available Chlorine Dioxide	Remove all animals and feed from premises. Remove all litter and manure from premises of facilities. Empty all troughs , racks and other feeding equipment/ watering appliances. Thoroughly clean all surfaces with soap and detergent and rinse with water.
Agricultural premises and equipment				
Poultry House Disinfection: Poultry Chiller Water/ Carcass spray	Soluble Concentrate 74602-2 9150-7 9150-8 74602-3	Dip Carcass	0.11 to 0.33 ounces per gallon for Chiller Water or 50 to 150 ppm 500 to 1200 ppm for Carcass Spray	None stated
Poultry Processing Water	Soluble Concentrate, Ready to use Solution 21164-6 21164-8 21164-9 53345-19 53345-20	None stated	3 ppm max	None stated

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	74517-1 74119-1			
Poultry Drinking Water	Soluble Concentrate 74602-2	Add to water	5ppm for fouled water 0.5 to 1.0ppm for control	None stated
Poultry, swine, cattle and other livestock Drinking Water	Soluble Concentrate 64449-1	Add to water	5ppm for fouled water 0.5 to 1.0ppm for control	None stated
Egg Room/ Hatching Area Incubator Room Tray Washing Room and Loading Platform	Soluble Concentrate 74602-2	High pressure sprayer	20 ppm for pre wash w/ sprayer 390 ppm to preclean floors 1,000 ppm treatment w/ fogger	None Stated
Egg Shells (Food Grade)	Soluble Concentrate 74602-2	Wet Thoroughly	5.0 ppm	Do not reuse solution
Chick Room, Chick Grading Box an Sexing room	Soluble Concentrate 74602-2	Fogger, Mop	1,000 ppm w/ fogger 390 ppm to mop floors	None Stated
Agricultural premises and equipment				
Horticulture uses Work Area and Benches	Soluble Concentrate 70060-6	Cloth, mop, sponge or sprayer	100 ppm	Do not Apply directly to Plant Material
Horticulture uses Pots and Flats	Soluble Concentrate	Soak	100 ppm	Remove all loose soil and plant residue prior to application

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	70060-6			
Horticulture uses Cutting Tools	Soluble Concentrate 70060-6	Soak	100 ppm	None Stated
Horticulture uses Bulbs		Soak	9 to 18 fl oz per gallon/ 253 ppm to 506 ppm	None Stated
Horticulture uses Greenhouse Glass, Walkways and under Bench Areas	Soluble Concentrate 70060-6	Spray	33 to 100 ppm	None Stated
Evaporative Coolers	Soluble Concentrate 70060-6	Add to water	100 ppm	None Stated
Food handling/ Storage establishments premises and equipment				
Non-Porous, Food Contact, hard surface sanitizer	Soluble concentrate: 74986-1, 70060-19, 21164-3, 21164-8, 21164-9, 5382-46	Foamer, Dilution device or spray	5ppm of activated available chlorine dioxide	None stated
Food Processing Plants (Poultry, Meat, Fish)	Soluble Concentrate 74602-2, 21164-3	fogger	0.5 ppm	Ventilate for 15 minutes prior to reentry
Food Processing Plants (Poultry, Meat, Fish) Food Contact Surface Sanitizer	Soluble concentrate: Reg:53345-14 53345-19 53345-20	1 minute contact time	50ppm- 1,000 ppm total available chlorine Dioxide	Preclean and rinse equipment. Do not reuse solution. Do not rinse treated surface

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	69151-3 70060-6 9150-7			
Food handling/ Storage establishments premises and equipment				
Fruit and Vegetables	Soluble Concentrate 9150-8	Spray or dip	500 to 1200 ppm	Rinse with potable water after treatment.
Dairies, Breweries and Bottling Plants	Soluble Concentrate 74602-2 74602-1	Fogger	0.5 ppm	Ventilate for 15 minutes prior to reentry
Dairies, Breweries and Bottling Plants Food Contact Surface Sanitizer	Soluble concentrate: 53345-14 53345-19 53345-20 9150-7 9150-8 21164-6 21164-8 21164-9 74602-2 5382-46 74517-1 53345-21 73139-1	1 minute contact time	50ppm- 1,000 ppm total available chlorine Dioxide	Preclean and rinse equipment. Do not reuse solution. Do not rinse treated surface

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Lube Additive for Moving Conveyors and Chains	Soluble concentrate: 74602-3, 21164-3	Inject into distribution system	10- 20 ppm	Preclean and sanitize all conveyor surfaces and associated structures
Canning Retort and Pasteurizer Cooling Water	Soluble concentrate: 70060-6, 74602-2, 70060-16, 53345-14, 9150-7, 9150-8, 46207-5, 5382-46	Controlled Chemical Feed Pump	0.1-5ppm	None stated
Food handling/ Storage establishments premises and equipment				
Stainless Steel Transfer Lines, Hydrocoolers and Pasteurizers	Soluble concentrate: 70060-6, 74602-2, 5382-46	Mix and fill lines and Equipment overnight	20 ppm	Preclean equipment or line thoroughly
Process Water for Vegetable Rinses, Tanks Lines	70060-6, 5382-46	Chemical Feed Pump or injector system	5 ppm	Preclean all tanks, flumes and lines with suitable detergent.
Fruit and Vegetable Rinse	Soluble concentrate: 45631-22, 45631-20, 74602-2, 45631-19, 53345-	Immersion, spray	1/3 fl. to 1 gallon of water per 25 gallons of water 3-5 ppm	Prewash whole fruits and vegetables with clean potable water.

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	20, 56485-4, 45631-22, 69151-5, 9150-7, 9150-8, 21164-21, 45631-19, 5382-46 79814-3			
Ice Making Plants and Machinery	Ready to use: 70060-13	Hang or place the sachet in the ice chamber out of direct contact with water or ice	50 to 200 g sachet per 100 to 400 lbs per day	None stated
	Soluble concentrate: 5382-46	Chemical Feed Pump or Injector System	20 ppm	None stated
Human Water Systems				

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Potable Drinking Water	Soluble concentrate: 53345-14 53345-19 53345-20 53345-22 69151-5 69151-3 70060-6 9150-7 9150-8 21164-6 21164-8 21164-9 21164-21 74602-2 5382-41 5382-42 5382-45 5382-46 74517-2 74517-1 53345-21 74602-1 79814-3	Metering Pump 1 mg/ liter (1ppm) or less 1 gallon per 100,000 gallons of treated water	1 mg/ liter (1ppm) or less 1 gallon per 100,000 gallons of treated water	None Stated
		None stated	5 ppm	None stated
	Ready to use: 70060-22	Tablet	1 tablet per liter of water. Four hour treatment time.	None stated

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Water Storage systems aboard Aircraft Boats, RV's Off-shore Oil Rigs	Soluble concentrate: 74602-2 5382-46	Add to tank and lines	50 to 500 ppm available chlorine dioxide	None stated
Human Water Systems				
Municipal Well Waters	Soluble concentrate: 53345-23 55050-1 55050-2 70060-6 46207-5 74602-2 5382-46	None stated	1 ppm	None stated
Commercial, institutional and industrial premises and equipment				
Non-Porous, Non-food Contact, hard surface sanitizer	Soluble concentrate: 74986-1, 53345-13, 70060-19, 45631-15,	Dilution device or sprayer	100 ppm-200 ppm	
Odors on Pets, Litter Boxes, Carpets and Concrete Floors	Soluble concentrate: 70060-6, 70060-4	Soak, Mop or rinse	For litter boxes: 625 – 650ppm For carpets: 500 ppm	Avoid direct contact with animal's eyes, nose and ears

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			Concrete floors: 1250 ppm Animal Baths: 80-100 ppm	
Residential				
Bathroom surfaces, shower stalls, curtains, laundry rooms, hampers and other non specified surfaces for mold and mildew control.	Soluble concentrate 74602-2	Spray, fog, pour, wipe	Dilute 13 fl. oz. solution as needed 5 minutes surface contact	After 30 minutes rinse with water
De-oderizer pouches for Refrigerators, Shoes, Gym Basements, Lockers, Laundry Hampers, Automobiles, Boat Cabins, athletic bags, trash cans pet areas, etc.	Ready to use Solution , Impregnated Materials 9804-10 70060-12	Hang or place sachet (deodorizing pouch)	5 to 200 grams sachet for use from 1 week to 2 months	None Stated.
Carpets	Ready to Use Powder 4822-512	Sprinkle on Carpet	2.5 oz per square yard.	Keep Children and pets off treated areas during application and until area is vacuumed.
Medical premises and equipment				
Hospitals, Laboratories and Institutions Hard Non Porous surfaces (Tile floors, Walls and Ceilings and Stainless	Soluble concentrate: 74602-2, 69151-1, 69151-5	Spray, Mop or sponge	Working Solution containing 300 to 500 ppm available Chlorine Dioxide	Clean all surfaces with a suitable detergent and rinse with water prior to disinfection.

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Steel Cold Rooms)				
Treatment of infectious medial waste (prior to disposal in a in a conventional solid waste landfill)	Soluble concentrate: 69972-1	Approved application system	None listed on label	None stated
Water Bath Incubator	Soluble concentrate: 74602-2, 70060-6	Pour solution into waterbath reservoir	Working Solution containing 300 ppm available Chlorine Dioxide to disinfect 50 ppm for odor and slime control	Clean reservoir with a suitable detergent and rinse with water prior to disinfection
Sterilization of Spent Biologicals in Steam Autoclaves	Soluble concentrate: 70060-6	Spray or pour directly into autoclave buckets	Working Solution containing 1,000 ppm available Chlorine Dioxide	None Stated
To Deodorize Animal Holding Rooms, Sick Rooms, Morgues and Work rooms	Soluble concentrate: 70060-6	Spray solution on to walls ceilings and floors	Working Solution containing 1,000 ppm available Chlorine Dioxide	Rooms to deodorize should be in a clean condition prior to autoclaving.
Swimming Pools				

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Swimming Pools	Tablet form, Ready to Use solution 70060-20	Tablet insert in hair and lint basket	1 tablet for under 10,000 gallons 2 tablets for over 10,000 gallons Apply every 3-4 weeks	Do not add this product through any automatic dispensing device. Apply product when no persons are in the pool.
Industrial Processes and water systems				
Waste water	Soluble concentrate: 53345-20, 55050-1 55050-2 56485-4 69151-4 69151-3 9150-7 10707-32 21164-6 21164-8 21164-9 21164-21 46207-5 5382-41 5382-43 5382-45 74119-1 74517-3 74517-2 53345-10	Batch load or meter	5.0 ppm to 100 ppm	None Stated

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	79814-3 53345-12 5382-42 74602-1			
Industrial Processes and water systems				
Water Cooling systems	Soluble concentrate: 53345-14 53345-19 53345-22 56485-4 69151-4 10707-32 46207-5 5382-46	Batch load or meter	5.0 ppm to 100 ppm	None stated
Industrial process water	Soluble concentrate: 53345-20 9150-7 21164-8	Batch load or meter	5.0 ppm to 100 ppm	NIOSH/MSHA approved respirator required
Water Based Cutting Oils	Soluble concentrate: 70060-6	Slug does system	32 oz to 10 gallons per million gallons of cutting oil	None stated

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Oil Wells : Secondary Recovery Operations	Soluble concentrate: 69151-3 68329-18 70060-6 10707-32 21164-3 5382-41 74602-3	None Stated	5,000 ppm available chlorine dioxide	None stated
Oilfield Injection	Soluble concentrate: 74602-1 79814-3	Shock dosage	200-3000ppm	None stated
Industrial Processes and water systems				
Recirculating Cooling Towers	Soluble concentrate: 74062-1 79814-3	Cooling tower drip pan	0.1 to 5.0 ppm 55.3 fl. oz per 1000 gallons of water for initial dosage 2.6 fl. oz per 100 gallons of water for subsequent dosage	None Stated
Once Through Water Cooling Systems	Soluble concentrate:	Slug and Continuous	Slug Dose: 5-25 ppm Continuous Dose: 0.25 to 2.0 ppm	None Stated



Use Site	Formulation/ EPA Reg No.	Method of Application	Application Rate/ No. of applications	Use Limitations
	53345-14 53345-19 53345-20 69151-3 70060-6 9150-7 9150-8 1757-96 5382-41 5382-43 5382-45 74119-1 74517-2 53345-21 74602-1 79814-3			
Paper Mills	Soluble concentrate: 53345-22 56485-4 69151-4 69151-3 70060-6	None stated	4.5 gallons product per 100 tons of paper .01 – 5.0 ppm (3.2 – 12.8 fluid ounces per 1,000 gallons of water	None stated

Use Site	Formulation/ EPA Reg No.	Method of Application	Application Rate/ No. of applications	Use Limitations
	74602-1 9150-7 9150-8 10707-32 21164-6 21164-8 21164-9 21164-21			
Industrial Processes and water systems				
Paper Mills	Soluble concentrate: 46207-5 5382-41 5382-42 5382-43 5382-45 74119-1 74517-2 53345-21 74655-2	None stated	4.5 gallons product per 100 tons of paper 1.25 – 5.0 ppm (3.2 – 12.8 fluid ounces per 1,000 gallons of water	None stated



****THANK YOU****