

MATERIAL SAFETY DATA SHEET — 16 Sections

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier VITAL OXIDE			[WHMIS Classification] Not Controlled		
Product Use Disinfectant Cleaner					
Manufacturer's Name Vital Technologies, Inc.			Supplier's Name Vital Technologies, Inc.		
Street Address PO Box 9932			Street Address PO Box 9932		
City West Palm Beach		State FL	City West Palm Beach		State FL
Postal Code 33419	Emergency Telephone 800 222-1222		Postal Code 33419	Emergency Telephone 800 222-1222 24 hrs. (561) 848-1717 9-5 EST	
Date MSDS Prepared Dec 1, 2009		MSDS Prepared By Safety Compliance		Phone Number (561) 848-1717	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

<p>CHEMICAL FAMILY: Aqueous Oxidant</p> <p>Hazardous Ingredients: No active ingredients are present at concentrations greater than 1% by weight. Contains items withheld in accordance with OSHA 29 CFR XVII-1910.1200 Section (i) "Trade Secrets". At these levels none of the ingredients are known to pose any hazards to human health. The liquid has a very mild ozone or chlorine-like odor. It is a water-based system with boiling and freezing points near those of water. At the concentrations used in this product no hazardous circumstances are anticipated if the product is used as directed.</p>					
	%	CAS Number	LD ₅₀ of Ingredient	LC ₅₀ of Ingredient	
	Oxychlorine Compounds	< than 1%	mixture	greater than >5,000 mg/kg	N/A
	n-Alkyl(60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium Chloride	< than 1%	33416-75-9	greater than >5,000 mg/kg	N/A
n-Alkyl(68%C12,32%C14) dimethyl ethylbenzyl ammonium chloride	< than 1%	8045-21-4	greater than >5,000 mg/kg	N/A	

SECTION 3 — HAZARDS IDENTIFICATION

Ingestion: Acute oral toxicity in albino rats: LD ₅₀ is greater than >5,000 mg/kg Generally Regarded As Safe (GRAS)
Skin Absorption: Modified Draize test on albino rabbits - no dermal irritation on prolonged contact Generally Regarded As Safe (GRAS)
Inhalation: Albino rats exposed to a respirable aerosol made from a solution of stabilized chlorine dioxide at levels up to 2.09 mg/l for one hour resulted in no deaths or gross pathology. Generally Regarded As Safe (GRAS)
Skin Contact: Modified Draize test on albino rabbits - no dermal irritation on prolonged contact. Generally Regarded As Safe (GRAS)
Potential Health Effects - Eye Contact: Possible moderate eye irritation may occur.

SECTION 4 — FIRST AID MEASURES

Eye Contact: IF IN EYES - Flush with water. If irritation persists consult an MD. IF SWALLOWED - Give large amounts of water.

SECTION 5 — FIRE FIGHTING MEASURES

Flammable X No	If yes, under which conditions? Non-Flammable	
Means of Extinction N/A		
Flashpoint (° C) and Method N/A	Upper Flammable Limit (% by volume) N/A	Lower Flammable Limit (% by volume) N/A
Auto-ignition Temperature (°C) N/A	Explosion Data — Sensitivity to Impact N/A	Explosion Data — Sensitivity to Static Discharge N/A
Hazardous Combustion Products No volatile organic compounds (VOC)		
[NFPA] N/A		

SECTION 6 — ACCIDENTAL RELEASE MEASURES

No special clean-up measures are required for the consumer product. To avoid the possibility of “bleaching” the spill should be absorbed with paper towels, and the area rinsed with clean water. No VOC’s. 100% biodegradable.

SECTION 7 — HANDLING AND STORAGE

Store large quantities in buildings that comply with OSHA 1910.106 and prevent build-up of vapors by maintaining continuous flow of fresh air.

Do not store above 120 °(F) or near open flame. Keep away from heat, strong sunlight, and strong acids. Do not smoke.

Keep container closed when not in use. Do not transfer contents to unlabelled bottles or other unlabelled containers.

Keep out of reach of children.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits	OSHA PEL N/A	Other N/A		
Specific Engineering Controls:				
If consumer product accidentally contacts strong acids in restricted ventilation area avoid breathing the vapors, and allow adequate time for the vapors to disperse before re-entering the restricted area.				
Personal Protective Equipment: Respirator None required for consumer product applied by spray bottle, sponge, mop, etc.	Eye: None required for consumer product	Footwear: None	Clothing: None	Gloves: None
Eye protection and respiration protection are suggested when product is applied by fogger or pressure sprayer				

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State Stable	Odor and Appearance Mild-Fresh	Odor Threshold (ppm) N/A
Specific Gravity (WATER = 1) 1.05	Vapor Density (air = 1) N/A	Vapor Pressure (mmHg) N/A
Evaporation Rate Less than Ether	Boiling Point 212 (° F)	Freezing Point 32 (° F)
PH Approx. 8 - 9	Coefficient of Water/Oil Distribution N/A	[Solubility in Water] 100%

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability Stable	X Yes	If no, under which conditions?
Incompatibility with Other Substances	X Yes	If yes, which ones? Strong Acids
Reactivity, and under what conditions? Avoid strong acids		
Hazardous Decomposition Products: Thermal or other decomposition may yield chlorine dioxide or chlorine.		

SECTION 11 — TOXICOLOGICAL INFORMATION

Effects of Acute Exposure: At the dilutions used in this formulation, stabilized chlorine dioxide was found to be non-toxic.	
Ingestion: Acute oral toxicity in albino rats: LD ₅₀ is greater than >5,000 mg/kg	
Skin Absorption: N/A	
Effects of chronic exposure: At the dilutions used in this formulation, stabilized chlorine dioxide was found to be non-toxic.	
Irritancy of Product: Moderately irritating to eyes	
Skin sensitization: Draize test on albino rabbits - no dermal irritation on prolonged contact	Respiratory sensitization: Albino rats exposed to a aerosol made from a solution of stabilized chlorine dioxide at levels up to 2.09 mg/l for one hour resulted in no deaths or gross pathology
Carcinogenicity-IARC N/A	Carcinogenicity - ACGIH N/A
Reproductive toxicity N/A	Teratogenicity N/A
Embrototoxicity N/A	Mutagenicity N/A
Name of synergistic products/effects N/A	

SECTION 12 — ECOLOGICAL INFORMATION

[Aquatic Toxicity] <i>P. promelas</i> (fat head minnow) 0% acute EC50 Daphnia 48hr. > 12.5 mg/l (NOEC) 12.5 mg/l

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposal: No special precautions are required for the consumer product.

SECTION 14 — TRANSPORT INFORMATION

DOT HAZARD CLASS: Not a US DEPT. of Transportation Hazard Material	DOT SHIPPING NAME: Not regulated	DOT LABEL: None required No UN number
---	-------------------------------------	--

SECTION 15 — REGULATORY INFORMATION

WHMIS Classification: Not Classified OSHA: Not Regulated SARA: Not Listed IARC: Not Listed RCRA: Not Listed California Prop 65: Not Listed Meets CARB requirements

SECTION 16 — OTHER INFORMATION

This MSDS has been prepared using data from sources considered technically reliable. It does not constitute a warranty as to the accuracy of the information contained within.
