



# Material Safety Data Sheet

**VITAL-OXIDE**

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February 9, 2007

## SECTION I - IDENTIFICATION

DISTRIBUTOR:

PHONE NUMBERS:

Product Information

Medical Emergency

Product Name: **VITAL-OXIDE**

**EPA Reg No: 82972-1**

**ByoGlobe**

1305 Shotgun Rd.

Sunrise, FL 33326

(888) 855-5359 available 9am-5pm EST

(800) 222-1222 available 24 hrs.

## SECTION II - COMPOSITION/ INFORMATION ON INGREDIENTS

**CHEMICAL FAMILY:** Aqueous Oxidant

**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.

<u>CHEMICAL NAMES</u>	<u>%</u>	<u>CAS #</u>	<u>LD50of Ingredient</u>	<u>LC50of Ingredient</u>
Stabilized Chlorine Dioxide	< less than 1%	10049-04-4	Greater than >5000 mg/kg	N/A
n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) Dimethyl Benzyl Ammonium Chloride	< less than 1%	33416-75-9	Greater than >5000 mg/kg	N/A
n-Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride	< less than 1%	8045-21-4	Greater than >5000 mg/kg	N/A

## SECTION III - COMPOSITION/ INFORMATION ON INGREDIENTS

**Ingestion:** Acute oral toxicity in albino rats: LD50 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 IV - FIRST AID MEASURES

**Eye Contact: IF IN EYES** - Flush with water. If irritation persists, consult and MD.

**If SWALLOWED** - Give large amounts of water.

**SECTION X - FIGHTING MEASURES**

Flammable: \_\_Yes  No                      If yes, under what conditions? Non-flammable  
Flashpoint (°C) and Method: N/A    Upper Flammable Limit (% by vol): N/A    Lower Flammable Limit (% by vol): N/A  
Auto-ignition Temperature (°C): N/A    Explosion Data-Sensitivity to Impact: N/A  
Explosion Data - Sensitivity to Static: N/A    Hazardous Combustion Products: No volatile organic compounds (VOC)  
[NFPA]: N/A

**SECTION VI - 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 VII- HANDLING AND STORAGE**

Store large quantities in buildings that comply with OSHA 1910.106 and prevent build-up of vapors by maintaining a 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 containers.

Keep out of reach of children.

**SECTION VIII - 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 required for consumer product.

**Clothing:** No protective clothing required for use with consumer product, including gloves

(Eye protection and respiration protection are suggested when product is applied by fogger and pressure sprayer.)

**SECTION IX - PHYSICAL AND CHEMICAL PROTECTION**

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 X - STABILITY AND REACTIVITY****Chemical Stability**Stable: Yes  No 

If no, under what conditions?

N/A

**Incompatible with Other Substances**Yes  No 

If yes, which ones?

Strong Acids

**Reactivity, under what conditions?**

Avoid strong acids.

**Hazardous Decomposition Products:** Thermal or other decomposition may yield chlorine dioxide or chlorine.**SECTION XI - TOXICOLOGY 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: LD50 is greater than > 5,000 mg/kg**Skin Absorption:** N/A**Effects of chronic exposure:** At the dilution rates 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 an 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/effect:** N/A**SECTION XII - ECOLOGICAL INFORMATION****[Aquatic Toxicity] P.** promelas (fat head minnow) 0% Acute EC50 Daphnia 48 he.  
> 12.5 mg/l (NOEC) 12.5 mg/l**Waste Disposal:** No special precautions are required for the consumer product.**SECTION XIII - DISPOSAL CONSIDERATIONS****SECTION XIV - TRANSPORT INFORMATION****DOT HAZARD CLASS:** not a US Dept  
of Transportation Hazard Material**DOT SHIPPING NAME:**  
Not regulated**DOT LABEL:**  
None required.**SECTION XV - 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 XVI - OTHER INFORMATION**

All chemicals used in manufacture are listed in TSCA inventory.

