



## Material Safety Data Sheet

### 1. Chemical Product & Company Data

Product Name: <b>Liqui-Zone</b>	
Manufacturer:  Il Rep-Z, Inc. 4660 Elizabeth Street Coraopolis, PA 15108 Telephone: 1-412-264-8340	Supplier:

### 2. Ingredients

Name	CAS #	UN #	% by volume
Chlorine dioxide (stabilized)	10049-04-4		1-5

### 3. Hazards Identification

Emergency Overview
Skin and eye irritant.

NOTE: Hazard information is based on the characteristics of the components of this mixture.

**Ingestion** - May irritate mouth and upper gastrointestinal tract.

**Inhalation** - Low concentration of the vapor may cause irritation of the respiratory tract.

**Eye Contact** - Causes mild eye irritation.

**Skin Contact** - Prolonged contact may irritate the skin.

### 4. First Aid

<p><b>Ingestion</b> - If patient is conscious give two glasses of water. Do not induce vomiting. Seek medical attention immediately.</p> <p><b>Inhalation</b> - Remove to fresh air. Administer artificial respiration if not breathing. If irritation develops, seek medical attention.</p> <p><b>Eye Contact</b> - Flush eyes with water for 15 minutes. Seek medical attention.</p> <p><b>Skin Contact</b> - Remove contaminated clothing. Wash skin with soap and water. Obtain medical attention if irritation persists.</p>
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## Liqui-Zone

### 5. Fire Fighting Measures

Flammability Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, under which conditions?	
Flashpoint: > 200 °F (93.3 °C)	Upper flammable limit % by volume	Lower flammable limit % by volume
Autoignition temperature	Hazardous combustion products	Explosion data
Means of extinction:		

### 6. Accidental Release Measures

<p>Wear personal protective equipment.</p> <p>Contain spill with absorbent mats or booms or inert materials such as sand. Material should be readily available in the workplace. Do not allow spill to reach watercourse or sewers.</p> <p>Collect and store waste materials in suitable containers for disposal i.e. closed polyethylene drums.</p> <p>Do not allow product to evaporate to dryness. Keep away from paper rags or other oxidizable material.</p> <p>Flush area well with water after clean up.</p>
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### 7. Handling & Storage

<p>Store away from oxidizers, reducing agents acids or combustible materials.</p> <p>Use personal protective equipment.</p> <p>Should product be spilled on clothing rinse well to remove product.</p> <p>Do not allow to evaporate to dryness on paper rags or other oxidizable material.</p> <p>Local exhaust may be required in some operations.</p>
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### 8. Exposure Controls & Personal Protection

Personal Protective Equipment				
Gloves Natural Rubber	Respirator NIOSH TC-23C organic vapor respirator or equivalent		Eye Goggles or full face respirator	
Footwear n. ap.	Clothing Coveralls or equivalent		Other n. ap.	
Exposure Guidelines				
*none established for product*				
	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
Chlorine Dioxide	0.1 ppm	0.3 ppm	0.1 ppm	0.3 ppm
Chlorine	0.5 ppm	1.0 ppm	0.5 ppm	1.0 ppm

## Liqui-Zone

### 9. Physical and Chemical Properties

Physical state Liquid	Odor and appearance Clear pale yellow liquid, chlorine odor	
Odor threshold (ppm) (chlorine) 0.01 ppm	Vapor pressure (mm Hg) n. av.	Vapor density (Air=1) n. av.
Evaporation (butyl acetate = 1) n. av.	Boiling point 213 °F (101 °C)	Freezing point n. av.
pH 6.4	Specific gravity 1.1	Coefficient water/oil distribution n. av.
Solubility in water 100%	Viscosity n. av.	% Volatiles (by weight) 99%

### 10. Stability and Reactivity

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions?	
Incompatibility with other substances Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions? Avoid contact with acids, chlorine, organic materials, reducing agents, oxidizers.	
Reactivity, and under what conditions?	Do not allow product to dry on cloth due to possibility of fire from oxidation.	
Hazardous decomposition products?	Chlorine gas.	

### 11. Toxicological Information

Route of Entry Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/>			
No toxicity studies have been conducted for the product. Chlorine dioxide LD50 (rat, oral) 1550 mg/kg (5% chlorine dioxide solution)			
Carcinogenicity No	Mutagenicity No	Teratogenicity No	Reproductive toxicity No
Synergistic products No	Sensitization No	Neurotoxicity No	Target organs Eyes and Skin

### 12. Ecological Information

n. av.
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## Liqui-Zone

### 13. Disposal Considerations

Do not dispose of product in storm or sanitary sewer systems.  
Do not allow discharge into groundwater or a watercourse.  
If product is to be disposed of, contact a licensed or registered waste disposal firm.  
Rinse empty containers with water prior to disposing. Dispose of to landfill or recycle.

### 14. Transport Information

Shipping Name: NOT REGULATED  
Hazard Class:  
UN Identification #:

### 15. Regulatory Information

This material safety data sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Act (Can.) and the Controlled Products Regulations (Can.) This product has been classified in accordance with the hazard criteria of the CPR (Can.) and the MSDS contains all the information required by the CPR (Can.).

This product is classed as a **skin and eye irritant** - 29 CFR 1910.1200 and Controlled Products Regulations (Can.)

WHMIS classification **D2B**

This product is not subject to the reporting requirement of Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA) 1986 and 40 CFR part 372.

### 16. Other Information

This product is a commercial deodorizing chemical.

For chemical emergency during transportation call INFOTRAC (US) **1-800-535-5053** (INT'L) **1-352-323-3500**

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#### Abbreviations:

n. av. = not available

mm Hg = millimeters of Mercury

COC = Cleveland Open Cup

LD = Lethal Dose

n. ap. = not applicable

PMCC = Pensky Martens Closed Cup

TWA = Time Weighted Average

LC = Lethal Concentration

ppm = parts per million

TCC = Tagliabue Closed Cup

STEL = Short Term Exposure Limit

CS = centistokes