



This item is only shipped via ground.
Continental US and Canada only
ORM-D
Limited Quantity

Phone: 863 658 0235

1. Chemical Product And Company Information

Chemical Name	Trade Names	Formula	Molecular Weight	CAS#	UN#
Chlorine Dioxide .3% Aqueous	CDS, ACD	ClO ₂	192.13 Anhydrous)	10049-04-4	UN 1908

Uses: Consumer
Commodity

Manufacturer/Distributor

KV Lab- Keavys Corner LLC 168 McCoy Drive, Lake Placid FL 33852
Phone: 863 658 0235

2. Composition and Product Information

Concentration by Weight

Chlorine Dioxide	Water
0.3%	99.7%
CAS# 10049-04-4	CAS# 7732-18-5

3. Hazard Identification

Emergency Overview:

A yellow Green solution that can be hazardous in case of skin contact (irritant), of eye contact (irritant). Hazardous in case of ingestion .

Routes of Entry:

Inhalation, Skin Contact/absorption, Eye Contact or Ingestion

Symptoms of Exposure:

Inhalation: Vapors from solutions may cause mild to severe irritation of the nose and throat.

Overexposure could cause coughing, sneezing, and labored breathing. Large amounts of vapor can cause the lungs to produce liquid..

Skin Contact/absorption: Can cause irritation of the skin. May cause allergic contact dermatitis with repeated contact in sensitive individuals.

Eye Contact: This solution and vapors can cause severe irritation to the eyes, with symptoms that include redness, tearing, and pain. Prolonged exposure can result in halos and blurred vision.

Ingestion: May cause gastrointestinal irritation, with symptoms including nausea, diarrhea, vomiting, and

abdominal pain

4 . First Aid Measures

Skin Wash the affected area with soap and water.

Eyes: Flush with water and if necessary, seek medical attention.

Inhalation: Ensure access to fresh air if chlorine dioxide has been inhaled. Provide the injured party with oxygen in the event of severe breathing difficulties and seek medical attention.

Ingestion: DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Otherwise rinse mouth with water, and drink a few glasses of water or milk. Seek medical attention if more than a minimal amount has been swallowed.

5. Fire Fighting Measures

Conditions Of Flammability: Does not burn, however chlorine dioxide gas may spontaneously decompose with a mild energy release at atmospheric levels over 10%. Chlorine Dioxide gas may explode violently at atmospheric concentrations over 30%.

Means To Extinguish: Water

Hazardous Combustion Products: None, does not burn.

Flash Point & Method: Not applicable

Upper Flammability Limit: Not applicable

Lower Flammability Limit: Not applicable

Auto-Ignition Temperature: Not applicable

Mechanical Impact Sensitivity: Not applicable (water solution)

Static Discharge Sensitivity: Not applicable (water solution)

Special Remarks on Fire Hazards:

Chlorine dioxide has highly toxic characteristics. Use a gas mask as a preventive measure, if there is any risk of chlorine dioxide in the air.

6. Accidental Release Measures

Leak Or Spill Procedures :

Chlorine Dioxide gas will be released in the event of a spill. Gas mask, safety goggles and safety gloves are necessary when dealing with large spills. Possible sources of ignition must be removed.

Spills of chlorine dioxide solutions should be diluted to a low concentration using copious amounts of water. Contact expert assistance in the event of major releases.

7. Handling Storage

Handling Procedures And Equipment :

Ensure necessary ventilation in work areas in which chlorine dioxide is being used. Use local exhaust ventilation at point of vapour emissions. Ensure Gas Masks/Filters are available. Ensure showers are available. Avoid inhalation and eye contact. Avoid possible ignition sources

8. Exposures Controls / Personal Protection

The OSHA permissible exposure limit (PEL) for ClO₂ gas in air is 0.1 ppm (0.3 mg/m³) as an 8-hour time weighted average. NIOSH recommended exposure limits (REL) and ACGIH threshold limit values (TLV) are also 0.1 ppm. NIOSH and ACGIH shortterm exposure limits (STEL) are 0.3 ppm (0.83 mg/m³) for periods not to exceed 15 minutes. The STEL concentration should not be

repeated more than 4 times per day and should be separated by intervals of at least 60 minutes.

OSHA PEL 0.100 ppm TWA
ACGIH TLV 0.100 ppm TWA
ACGIH TLV 0.300 ppm STEL

Protective Equipment: Eyes:

Engineering Controls: Use in well ventilated area.

9. Physical And Chemical Properties

State: Chlorine Dioxide gas in Aqueous Solution

Odor: Sharp, pungent Chlorine like odor.

Boiling Point: 100°C

Melting Point: Not applicable

Freezing Point: 0°C

pH: 5

Appearance: Yellow/Green Liquid.

Specific Gravity: 1 @ 0 °C

10. Stability And Reactivity

Chemical Stability:

In solution, Chlorine Dioxide is stable in the dark. On exposure to sunlight, the solution may decompose to an aqueous solution of chloride and chlorate ions. Upon decomposition Chlorine dioxide gas created can decompose with a mild energy release at atmospheric levels over 10%. Chlorine Dioxide gas may explode violently at atmospheric concentrations over 30%.

Incompatible Substances: Avoid exposure to light Avoid contact with: metals, reducing agents, strong oxidizing agents, sulfur compounds or sulfur Avoid contact with: metals, reducing agents, strong oxidizing agents, sulfur compounds or sulfur containing components, carbon monoxide, excessive heat, mercury, organic materials, phosphorus.

Hazardous Decomposition Products: May form Chlorine, hydrochloric acid gas, and oxygen.

11. Toxicological Information

Inhalation: Vapors from solutions may cause mild to severe irritation of the nose and throat. Overexposure could cause coughing, sneezing, and labored breathing. Large amounts of vapor can cause the lungs to produce liquid..

Skin Contact/absorption: Can cause irritation of the skin. May cause allergic contact dermatitis with repeated contact in sensitive individuals.

Eye Contact: This solution and vapors can cause severe irritation to the eyes, with symptoms that include redness, tearing, and pain. Prolonged exposure can result in halos and blurred vision.

Ingestion: May cause gastrointestinal irritation, with symptoms including nausea, diarrhea, vomiting, and abdominal pain

LD50 Chlorine Dioxide Gas : 292 mg/kg (rat)

LC50: Not Available

Exposure Limits: See Section 8 Exposure Controls

Irritancy: Severe (corrosive)

Sensitization: Not reported as a human sensitizer.

Carcinogenicity: Does not appear in reference lists.

Teratogenicity & Mutagenicity: Does not apply to this product. No effects.

Reproductive Toxicology : Does not appear in reference lists.

Toxicological Synergism : May have synergistic effects in conjunction with chlorine, chlorine oxides, and chlorine/flourine compounds.

12. Ecological Information

Ecological Information: Not Established.

Low potential for bioaccumulation.

13. Disposal Considerations

Disposal Considerations :

Contained ponds, pools, or drains containing organic matter will normally provide an environment in which residual chlorine dioxide will be reduced to harmless compounds quickly. Do not dispose of waste with normal garbage, or to sewer systems. Whatever cannot be saved for recovery or recycling,

including containers should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options.

RCRA: Test waste material for corrosivity, D002, prior to disposal.

14. Transportation Information

PROPER SHIPPING NAME: Corrosive liquid n.o.s., (0.3% Chlorine dioxide)

UN NUMBER: 1760

CAS NUMBER: 7647-01-0

HAZMAT CLASS: Class 8 Corrosive

PACKAGING CLASS: III (Do not store in Metal Containers.)

15. Regulatory Information

USA Regulations

TSCA (Toxic Substances Control Act) Status: Intentional Ingredients Listed.

CERCLA RQ-40 CFR 302.4(a):None listed

SARA 302 Components: None

OSHA Process Safety Management: Chlorine Dioxide TQ(lbs.) 1000

EPA Accidental Release Prevention: Chlorine Dioxide TQ(lbs.) 1000

Canada

WHMIS Classification Not Available

16. Other Information

Prepared By: Steve Pardee - Keavys Corner LLC

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