

MATERIAL SAFETY DATA SHEET

Sabre Technical Services, LLC

Page 001

Date Prepared: 1/01/08

Date Printed: 1/01/08

CHLORINE DIOXIDE ≤ 0.5% AQUEOUS SOLUTION

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: CHLORINE DIOXIDE ≤ 0.5% AQUEOUS SOLUTION

General or Generic ID: Chemical Oxidant

Company
Sabre Technical Services, LLC
Slingerlands, New York

Emergency Telephone Number:
(703) 485-4588
24 Hours everyday
Regulatory Information Number:
(518)_514-1572

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
Water	7732-18-5	99.6-99.9
Chlorine Dioxide	10069-04-4	0.0-0.4

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Unlikely to cause eye irritation or injury.

Skin

Unlikely to cause skin irritation or injury.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material is not likely to be harmful. Respiration/protection should be worn if concentrations exceed applicable standards.

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CHLORINE DIOXIDE \leq .05% AQUEOUS SOLUTION

Symptoms of Exposure

Signs and symptoms of exposure to this material through swallowing include: stomach or intestinal upset (nausea, vomiting, diarrhea).

Target Organ Effects

Chlorine dioxide gas is a mucous membrane and respiratory tract irritant.

Developmental Information

Based on the available information, risk to the fetus from material exposure to this maternal exposure to this material cannot be assessed.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

No data.

Primary Route(s) of Entry

Inhalation, ingestion.

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Swallowing

First aid is not normally required. If symptoms develop, seek medical attention.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Notes to Physicians

No data

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5. FIRE FIGHTING MEASURES

Flash Point

Not applicable

Explosive Limit

Chlorine dioxide gas is explosive at concentration of 10% in air or greater.

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: chlorine, hydrochloric acid gas, oxygen.

Fire and Explosion Hazards

No special fire hazards are known to be associated with the product.

Extinguishing Media

Water fog.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health – 1, Flammability – 0, Reactivity – 1

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material. Flush area with water.

Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Flush area with water.

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7. HANDLING AND STORAGE

Handling agitation of product should be minimized to prevent the evolution of chlorine dioxide gas into the breathing zones of workers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear safety glasses in compliance with OSHA regulations. (Consult your safety representative).

Skin Protection

Wear resistant gloves such as: neoprene to prevent skin contact, wear impervious clothing and boots. Other protective equipment: eyewash station, emergency shower.

Respiratory Protection

Exposures in the workplace should be monitored to determine if worker exposure exceeds the facility specified exposure "action level" or the use of the product produces adverse health effects or symptoms of exposure. Only a NIOSH-approved respirator is to be used. Monitoring results must be used to assess the proper level or respiratory protection necessary. Proper engineering and/or administrative controls should be used to reduce worker exposure. The facility's respiratory protection program must meet the requirements established in 29 CFR 1910.134, which includes a program for medical evaluation.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure.

Exposure Guidelines

Component

Water (7732-18-5)

No exposure limits established

CHLORINE DIOXIDE (10049-04-4)

OSHA Pel 0.100 ppm – TWA

ACGIH TLV 0.100 ppm – TWA

ACGIH TLV 0.300 ppm – STEL

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 212.0F (100.0 c) @ 760 mmHg

Vapor Pressure

(for component) 17.500 mmHg

Specific Vapor Density

No data

Specific Gravity

1.00 @ 77.00 F

Liquid Density

8.320 lbs/gal @ 77.00 F

1.00 kg/l @ 77.00 C

Percent Volatiles

100.0%

Evaporation Rate

Slower than Ethyl Ether

Appearance

Yellow-Reddish Liquid

State

Liquid

Physical Form

Homogeneous Solution

Color

Yellow-Reddish

Odor

Pungent chlorine-like odor

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pH

3.0 to 7.0

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: Chlorine, hydrochloric acid gas, oxygen.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: metals, reducing agents, strong oxidizing agents, sulfur components.

11. TOXICOLOGICAL INFORMATION

Chlorine dioxide gas is a mucous membrane and respiratory tract irritant.

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations.

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14. TRANSPORT INFORMATION

DOT Information – 49 CFR 172.101

DOT Description:
No data

Container/Mode:
No data

NOS Component:
None

RQ (Reportable Quantity) – 49 CFR 172.101
Not applicable

Other Transportation Information

Chlorine dioxide solutions may not be transported in commerce.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status
TSCA (United States) The intentional ingredients of this product are listed.

CERCLA RQ – 40 CFR 302.4(a)
None listed

SARA 302 Components – 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class – 40 CFR 370.2
Immediate () Delayed () Fire () Reactive () Sudden Release of
Pressure ()

SAARA 313 Components – 40 CFR 372.65

Section 313 Components (s)	CAS Number	%
CHLORINE DIOXIDE	10049-04-4	.40

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OSHA Process Safety Management 29 CFR 1910

PSM Component(s)	Condition	TQ (lbs)

CHLORINE DIOXIDE		100

EPA Accidental Release Prevention 40 CFR 68

RMP Component(s)	Condition	TQ (lbs)

CHLORINE DIOXIDE (Chlorine Oxide (CL02))		100

International Regulations

Inventory Status
Not determined

State and Local Regulations

California Proposition 65
None

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.