

PureOxi-ClO₂ Solution derived from sodium chlorite, sodium hypochlorite, HCL

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 7/8/2025 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : PureOxi

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Oxidant
Restrictions on use : Other

1.3. Supplier

PureLine Treatment Systems, LLC.
1241 N. Ellis Street
Bensenville, IL 60106
U.S.
T 847-963-8465

1.4. Emergency telephone number

Emergency number : (800)255-3924, +1 (813)248-0585 [ChemTel]

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4

Harmful if swallowed

Serious eye damage/eye irritation Category 2

Causes serious eye irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

Harmful if swallowed

Causes serious eye irritation

May be corrosive to metals

Causes skin irritation

Precautionary statements (GHS US) :

Keep only in original container.

Wear protective gloves.

Wash exposed areas thoroughly after handling.

Avoid breathing fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

If on skin: Wash with plenty of water.

If skin irritation occurs: Get medical attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a doctor if you feel unwell.

Specific treatment (see First Aid Measures on this SDS).

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Take off contaminated clothing and wash it before reuse.
Absorb spillage to prevent material damage.
Store in corrosive resistant/ container with a resistant inner liner.
Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
chlorine dioxide ... %	CAS-No.: 10049-04-4	0.3

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents. Refer to the 'Technical Data Sheet' for the product composition.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell. If medical advice is needed, have product container or label at hand. refer to label.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If breathing stops, give artificial respiration. Call 911, if available.
First-aid measures after skin contact	: Wash skin with plenty of water. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Take off contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Immediately call a poison center or doctor/physician. Rinse mouth. Do not induce vomiting because of corrosive effects.

4.2. Most important symptoms and effects (acute and delayed)

Effects on humans	: NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate for the use of gastric lavage.
Symptoms/effects after eye contact	: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Storage temperature : 35 – 80 °F

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PureOxi	
No additional information available	
chlorine dioxide ... % (10049-04-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Chlorine dioxide

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chlorine dioxide ... % (10049-04-4)	
ACGIH OEL C [ppm]	0.1 ppm
Remark (ACGIH)	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Chlorine dioxide
OSHA PEL TWA [1]	0.3 mg/m³
OSHA PEL TWA [2]	0.1 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Gloves.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Green to yellow
Odor : chlorine-like
Odor threshold : No data available
pH : 2-3
Melting point : Not applicable
Freezing point : 32 °F
Boiling point : 212 °F
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available

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Flammability	: Not applicable Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.03 g/cm ³
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong bases. Strong acids. Combustible materials.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

PureOxi	
ATE US (oral)	333.333 mg/kg body weight
chlorine dioxide ... % (10049-04-4)	
LD50 oral rat	93.86 mg/kg Source: ECHA
ATE US (oral)	100 mg/kg body weight

Skin corrosion/irritation	: Not classified pH: 2-3
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Serious eye damage/irritation	: Causes serious eye irritation. pH: 2-3
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: Not applicable
Effects on humans	: NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate for the use of gastric lavage.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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chlorine dioxide ... % (10049-04-4)	
LC50 - Fish [1]	0.049 mg/l Source: EHCA
EC50 - Crustacea [1]	0.063 mg/l Source: ECHA
LC50 - Fish [2]	0.021 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
NOEC (chronic)	≥ 500 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 500 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '36 d'

12.2. Persistence and degradability

chlorine dioxide ... % (10049-04-4)	
Persistence and degradability	Biodegradability: not applicable.

12.3. Bioaccumulative potential

chlorine dioxide ... % (10049-04-4)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

12.4. Mobility in soil

chlorine dioxide ... % (10049-04-4)	
Ecology - soil	No (test)data on mobility of the component(s) available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not applicable
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IMDG

Transport hazard class(es) (IMDG)	: Not applicable
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IATA

Transport hazard class(es) (IATA)	: Not applicable
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14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

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15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
chlorine dioxide ... %(10049-04-4)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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ICSDS_SDS_USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.