

# Redi-Ox

# SAFETY DATA SHEET

Preparation Date: 13-Apr-2011

Revision Date: 13-Dec-2018

Revision Number: 3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Name** Redi-Ox

### Other means of identification

**Item#:** 2230

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Chlorine dioxide hard surface sanitizer, Restricted to professional users

**Uses advised against** All other

### Details of the supplier of the safety data sheet

**Supplier** DeLaval Cleaning Solutions  
11100 N. Congress Ave.  
Kansas City, MO 64153  
Tel: 816-891-7700, 8am – 5pm M-F

### Emergency Telephone Number

Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2B

### Label Elements

#### Emergency Overview

#### WARNING

#### Hazard Statements

Causes skin irritation  
Causes eye irritation  
Harmful if swallowed  
Harmful in contact with skin  
HARMFUL IF INHALED



<b>Appearance</b> Yellow Green	<b>Physical state</b> Liquid	<b>Odor</b> Pungent
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**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

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 advice/attention.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do not induce vomiting.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Chlorine dioxide	10049-04-4	0.3

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first-aid measures**

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Consult a physician if necessary.
<b>Inhalation</b>	Do not breathe dust. Call a physician or Poison Control Center immediately. Give oxygen or artificial respiration if needed. Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects, both acute and delayed****Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water.

**Unsuitable Extinguishing Media**

No information available.

**Specific hazards arising from the chemical**

No information available.

**Hazardous Combustion Products**

chlorine compounds including hydrogen chloride

**Sensitivity to static discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**                      **Health hazards** 1                      **Flammability** 0                      **Instability** 1

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

**Environmental Precautions**

Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

**Methods and material for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling**    Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage**    The material should be stored indoors, only in the containers in which it is shipped, or in containers authorized by the manufacturer for such storage. Storage temperatures should be maintained above 50°F and below 110°F. The material should not be stored outside or exposed to freezing temperatures (below 32°F). The material should not be heated to temperatures in excess of 140°F.

**Incompatible Materials**                      light metals (e.g. aluminum, copper, brass, zinc galvanized), reducing agents, strong oxidizing agents, organic materials

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chlorine dioxide 10049-04-4	Ceiling: 0.1 ppm	TWA: 0.1 ppm TWA: 0.3 mg/m <sup>3</sup> STEL: 0.3 ppm STEL: 0.9 mg/m <sup>3</sup>	5 ppm

*IDLH: Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Controls**                              Ensure adequate ventilation.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face Protection</b>	If splashes are likely to occur, wear:. Face-shield. Goggles.
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Pungent
<b>Appearance</b>	Yellow Green	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
<b>pH</b>	No information available	
<b>Melting point/freezing point</b>	No information available	
<b>Boiling Point/Range</b>	100 °C / 212 °F	
<b>Flash Point</b>	No information available	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit</b>	No information available	
<b>Lower flammability limit</b>	No information available	
<b>Vapor Pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific Gravity</b>	No information available	
<b>Water Solubility</b>	No information available	

<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity of Product</b>	No information available
<b>Dynamic viscosity</b>	No information available

### Other information

<b>Liquid Density</b>	No information available
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## 10. STABILITY AND REACTIVITY

### Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None known.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

light metals (e.g. aluminum, copper, brass, zinc galvanized), reducing agents, strong oxidizing agents, organic materials

### Hazardous decomposition products

Chlorine. Hydrogen chloride gas.

## 11. TOXICOLOGICAL INFORMATION

**Principal Routes of Exposure** Eye contact, Skin contact, Inhalation, Ingestion

**Information on likely routes of exposure**

**Eyes** Avoid contact with eyes. Moderately irritating to the eyes.  
**Skin** Avoid contact with skin. May cause skin irritation. Prolonged skin contact may cause skin irritation and/or dermatitis.  
**Ingestion** Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
**Inhalation** Harmful by inhalation. Avoid breathing vapors or mists. Irritating to mucous membranes. Product dust may be irritating to eyes, skin and respiratory system.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** None known.  
**Mutagenic effects** None known.  
**Carcinogenicity** Contains no ingredient listed as a carcinogen.

**Reproductive Effects** None known.  
**STOT - single exposure** None known.  
**STOT - repeated exposure** None known.  
**Aspiration Hazard** None known.

**Numerical measures of toxicity**

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chlorine dioxide 10049-04-4	= 292 mg/kg ( Rat )	No data available	= 32 ppm ( Rat ) 4 h

0% of the mixture consists of ingredient(s) of unknown toxicity

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

If available, ecotoxicity values of individual components are shown below.

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste Disposal Method** Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

**Contaminated Packaging** Triple rinse containers. Avoid contamination of any water supply with product or empty packaging. Empty containers should be taken for local recycling, recovery or waste disposal.

## 14. TRANSPORT INFORMATION

**DOT**

**UN-No** 1760  
**Proper Shipping Name** Corrosive liquid, n.o.s ( chlorine dioxide aqueous solution 0.3% )  
**Packing Group** III

## 15. REGULATORY INFORMATION

**Superfund Amendments and Reauthorization Act of 1986 (SARA) - Section 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Chlorine dioxide (CAS# 10049-04-4)

State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Chlorine dioxide 10049-04-4	X	X	X

U.S. EPA Label information

**EPA Pesticide registration number** Not applicable

## 16. OTHER INFORMATION

**Preparation Date:** 13-Apr-2011  
**Revision Date:** 13-Dec-2018  
**Revision Note:** None

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of SDS**