

# Redi-Ox

# SAFETY DATA SHEET

Preparation Date: 13-Apr-2011

Revision Date: 28-May-2015

Revision Number: 2

## 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 No information available

### 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



**Appearance** Yellow Green**Physical state** Liquid**Odor** Pungent**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

**Hazards not otherwise classified (HNOC)****Other Information**

- Toxic to aquatic life  
 Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Chlorine dioxide	10049-04-4	0 - 10%	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****FIRST AID MEASURES**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact** 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.

**Inhalation** Call a physician or Poison Control Centre immediately. Give oxygen or artificial respiration if needed.

**Ingestion** Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Centre immediately.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects** According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** 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.

**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.

## 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, reducing agents, strong oxidizing agents, organic materials

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Keep out of the reach of children

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chlorine dioxide 10049-04-4	TWA: 0.1 ppm STEL: 0.3 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>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<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
<b>Color</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>Solubility in other solvents</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	
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

**Other information**

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Density</b>	No information available
<b>Bulk Density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**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, reducing agents, strong oxidizing agents, organic materials

**Hazardous decomposition products**

Chlorine. Hydrogen chloride gas.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chlorine dioxide 10049-04-4	= 292 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

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

**Sensitization** No information available.  
**Mutagenic effects** No information available.  
**Carcinogenicity** No information available.

**Reproductive Effects** No information available.  
**STOT - single exposure** No information available.  
**STOT-repeated exposure** No information available.  
**Aspiration Hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

<b>Waste Disposal Method</b>	Dispose of in accordance with local regulations. Should not be released into the environment.
<b>Contaminated Packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.

<b>14. TRANSPORT INFORMATION</b>
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**DOT**

<b>UN-No</b>	1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s ( chlorine dioxide aqueous solution 0.3% )
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

<b>TSCA</b>	TSCA
<b>DSL/NDSL</b>	DSL/NDSL
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not Comply
<b>CHINA</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Does not Comply
<b>AICS</b>	Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. EPA Label information**

**EPA Pesticide registration number** Not applicable

<b>16. OTHER INFORMATION</b>
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<b><u>NFPA</u></b>	<b>Health</b> 1	<b>Flammability</b> 0	<b>Instability</b> 1	<b>Physical Hazard</b> -
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**Preparation Date:** 13-Apr-2011

**Revision Date:** 28-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of SDS**