

## Safety Data Sheet



## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

### 1.1 Product identifier

<b>Product Name</b>	• <b>Oxygen (Refrigerated Liquid)</b>
<b>Synonyms</b>	• Cryogenic Liquid Oxygen; LOX
<b>CAS Number</b>	• 7782-44-7
<b>Product Code</b>	• 10075
<b>EC Number</b>	• 231-956-9
<b>Molecular Formula</b>	• :O 2:

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

<b>Relevant identified use(s)</b>	• Medical and general analytical or synthetic chemical uses
-----------------------------------	---

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

<b>Manufacturer</b>	• Air Liquide 2700 Post Oak Blvd. Houston, TX 77056 United States www.us.airliquide.com sds@airliquide.com
<b>Telephone (Technical)</b>	• 713-896-2896
<b>Telephone (Technical)</b>	• 800-819-1704

### 1.4 Emergency telephone number

<b>Manufacturer</b>	• 800-424-9300 - CHEMTREC
<b>Manufacturer</b>	• +1 703-527-3887 - Outside United States

## Section 2: Hazards Identification

### EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]  
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

### 2.1 Classification of the substance or mixture

<b>CLP</b>	• Oxidizing Gases 1 - H270 Refrigerated Liquefied Gas - H281
<b>DSD/DPD</b>	• Oxidizing (O) R8

### 2.2 Label Elements

CLP

**DANGER**



- Hazard statements**
- H270 - May cause or intensify fire; oxidizer
  - H281 - Contains refrigerated gas; may cause cryogenic burns or injury

### Precautionary statements

- Prevention**
- P220 - Keep/Store away from clothing and other combustible materials.
  - P244 - Keep reduction valves free from grease and oil.
  - P282 - Wear cold insulating gloves, face shield and/or eye protection.
- Response**
- P315 - Get immediate medical advice/attention.
  - P336 - Thaw frosted parts with lukewarm water. Do not rub affected area.
  - P370+P376 - In case of fire: Stop leak if safe to do so.
- Storage/Disposal**
- P403 - Store in a well-ventilated place.

### DSD/DPD



- Risk phrases**
- R8 - Contact with combustible material may cause fire.
- Safety phrases**
- S2 - Keep out of reach of children.
  - S17 - Keep away from combustible material.

## 2.3 Other Hazards

- CLP**
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD**
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. This product is considered dangerous according to the European Directive 67/548/EEC.

## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Oxidizing Gases 1 - H270
  - Refrigerated Liquefied Gas - H281
  - Hazards Not Otherwise Classified - Health Hazard - Frostbite

### 2.2 Label elements

OSHA HCS 2012

#### DANGER



- Hazard statements**
- May cause or intensify fire; oxidizer - H270
  - Contains refrigerated gas; may cause cryogenic burns or injury - H281

### Precautionary statements

- Prevention**
- Keep/Store away from clothing and other combustible materials. - P220
  - Keep reduction valves free from grease and oil. - P244
  - Wear cold insulating gloves, face shield and/or eye protection. - P282
- Response**
- In case of fire: Stop leak if safe to do so. - P370+P376
  - Thaw frosted parts with lukewarm water. Do not rub affected area. - P336
  - Get immediate medical advice/attention. - P315
- Storage/Disposal**
- Store in a well-ventilated place. - P403

## 2.3 Other hazards

### OSHA HCS 2012

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

### According to WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

- Compressed Gas - A
- Oxidizing - C

## 2.2 Label elements

### WHMIS



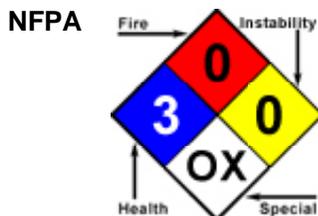
- Compressed Gas - A
- Oxidizing - C

## 2.3 Other hazards

### WHMIS

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## 2.4 Other information



## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Oxygen	CAS:7782-44-7 EC Number:231-956-9	> 99.5%	NDA	EU DSD/DPD: Annex I - O; R8 EU CLP: Annex VI - Ox. Gas 1, H270; Press. Gas - Refr. Liq., H281 OSHA HCS 2012: Ox. Gas 1; Press Gas - Refr. Liq.	NDA
Maximum Impurities	NDA	< 0.5%	NDA	EU CLP: Not Relevant OSHA HCS 2012: Not Relevant	*

### 3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No

1272/2008.

**Key to abbreviations**

None of the trace impurities in this product contribute significantly to the hazards associated with the product. All hazard information pertinent to this \* = product has been provided in the Safety Data Sheet, per the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and state equivalent standards.

**Section 4 - First Aid Measures****4.1 Description of first aid measures****Inhalation**

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

**Skin**

- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. In order to prevent further tissue damage, do NOT attempt to remove frozen clothing from frostbitten areas. If frostbite has not occurred, immediately and thoroughly wash contaminated skin with soap and water.

**Eye**

- If eye tissue is frozen, seek medical attention immediately; if tissue is not frozen, immediately and thoroughly flush the eyes with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation, pain, swelling, lacrimation or photophobia persist, get medical attention as soon as possible.

**Ingestion**

- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

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

- Refer to Section 11 - Toxicological Information.

**4.3 Indication of any immediate medical attention and special treatment needed****Notes to Physician**

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

**4.4 Other information**

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

**Section 5 - Firefighting Measures****5.1 Extinguishing media****Suitable Extinguishing Media**

- Use extinguishing agent suitable for type of surrounding fire.  
SMALL FIRES: Dry chemical or CO<sub>2</sub>.  
LARGE FIRES: Water spray or fog.

**Unsuitable Extinguishing Media**

- No data available

**5.2 Special hazards arising from the substance or mixture****Unusual Fire and Explosion Hazards**

- Containers may explode when heated.  
Ruptured cylinders may rocket.  
This gas vigorously accelerates combustion. Avoid all contact with combustible

materials. Some non-flammable materials in air will burn under an over-oxygenated atmosphere.

## Hazardous Combustion Products

- No data available

## 5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Always wear thermal protective clothing when handling refrigerated/cryogenic liquids. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk.  
FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.  
FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.  
FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.  
FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.  
FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.  
FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### Personal Precautions

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate the area before entry.

#### Emergency Procedures

- Stop leak if you can do it without risk. Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak. LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile)

### 6.2 Environmental precautions

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

### 6.3 Methods and material for containment and cleaning up

#### Containment/Clean-up Measures

- Stop leak if you can do it without risk.  
Do not direct water at spill or source of leak.  
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.  
If possible, turn leaking containers so that gas escapes rather than liquid.  
Isolate area until gas has dispersed.  
Ventilate the area.  
Allow substance to evaporate.

### 6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

- Use only with adequate ventilation. Ventilate closed spaces before entering. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders

should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage

- Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over.

## 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Exposure Limits/Guidelines

- Currently there are no applicable exposure limits established for this material.

### 8.2 Exposure controls

#### Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof - electrical, ventilating and/or lighting equipment.

#### Personal Protective Equipment

##### Respiratory

- Not required under normal conditions of use.

##### Eye/Face

- Wear safety glasses.

##### Skin/Body

- Wear leather gloves when handling cylinders.

#### Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless compressed gas with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	-183.11 C(-297.598 F)	Melting Point	-218.55 C(-361.39 F)
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	0.0489 % @ 0 C(32 F)
Viscosity	0.0002 Poise (P, Ps) or dyne-second/cm <sup>2</sup> @ 0 C(32 F)	Explosive Properties	Data lacking
Oxidizing Properties:	Oxidizing gas.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	1.105 Air=1
Evaporation Rate	Data lacking		

**Flammability**

Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not flammable.		

**Environmental**

Octanol/Water Partition coefficient	Data lacking		
-------------------------------------	--------------	--	--

**9.2 Other Information**

- No additional physical and chemical parameters noted.

**Section 10: Stability and Reactivity****10.1 Reactivity**

- No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

- Stable under normal temperatures and pressures.

**10.3 Possibility of hazardous reactions**

- Hazardous polymerization will not occur.

**10.4 Conditions to avoid**

- Incompatible materials.

**10.5 Incompatible materials**

- Organic 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****Oxygen (Refrigerated Liquid) 7782-44-7**

Test Type	Dosage	Route	Species	Duration	Results	Test Class	Target Organs	Comments
Reproductive	= 10 pph	Inhalation	Rat	9 Hour(s)	TCLo	NDA	NDA	NDA

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

<b>Skin sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-RE</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-SE</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Toxicity for Reproduction</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Respiratory sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Serious eye damage/Irritation</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

## Potential Health Effects

### Inhalation

- Acute (Immediate)**
  - Under normal conditions of use, no health effects are expected. Overexposure to oxygen may cause hyperoxia leading to oxygen toxicity.
- Chronic (Delayed)**
  - No data available

### Skin

- Acute (Immediate)**
  - Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
- Chronic (Delayed)**
  - No data available

### Eye

- Acute (Immediate)**
  - Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
- Chronic (Delayed)**
  - No data available

### Ingestion

- Acute (Immediate)**
  - Ingestion is not anticipated to be a likely route of exposure to this product.
- Chronic (Delayed)**
  - No data available

## Section 12 - Ecological Information

### 12.1 Toxicity

- As an inert gas, this product would have no effect on aquatic life.

### 12.2 Persistence and degradability

- Oxygen occurs naturally in the atmosphere. The gas will be dissipated rapidly in well ventilated areas.

### 12.3 Bioaccumulative potential

- Material data lacking.

### 12.4 Mobility in Soil

- Material data lacking.

### 12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been conducted for this material.

### 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

#### Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1073	Oxygen, refrigerated liquid (cryogenic liquid)	2.2	NDA	NDA
TDG	UN1073	OXYGEN, REFRIGERATED LIQUID	2.2	NDA	NDA
IMO/IMDG	UN1073	OXYGEN, REFRIGERATED LIQUID	2.2	NDA	NDA
IATA/ICAO	UN1073	Oxygen, refrigerated liquid	2.2	NDA	NDA

#### 14.6 Special precautions for user

- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

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

- Not relevant.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA Hazard Classifications

- Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
Oxygen	NDA	No	No	No
Maximum Impurities	NDA	No	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Oxygen	NDA	No	No	No	No	No
Maximum Impurities	NDA	No	No	No	No	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Oxygen	NDA	No	No	No
Maximum Impurities	NDA	No	No	No

## Australia

### Labor

#### Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

- Oxygen 7782-44-7 > 99.5% Not Listed

#### Australia - High Volume Industrial Chemicals List

- Oxygen 7782-44-7 > 99.5% Not Listed

#### Australia - List of Designated Hazardous Substances - Classification

- Oxygen 7782-44-7 > 99.5% O R8

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

- Oxygen 7782-44-7 > 99.5% Not Listed

#### Australia - Ozone Protection Act - Scheduled Substances

- Oxygen 7782-44-7 > 99.5% Not Listed

#### Australia - Priority Existing Chemical Program

- Oxygen 7782-44-7 > 99.5% Not Listed

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

- Oxygen 7782-44-7 > 99.5% A, C

#### Canada - WHMIS - Ingredient Disclosure List

- Oxygen 7782-44-7 > 99.5% Not Listed

## Environment

### Canada - CEPA - Priority Substances List

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## China

### Environment

#### China - Ozone Depleting Substances - First Schedule

- Oxygen 7782-44-7 > 99.5% Not Listed

#### China - Ozone Depleting Substances - Second Schedule

- Oxygen 7782-44-7 > 99.5% Not Listed

#### China - Ozone Depleting Substances - Third Schedule

- Oxygen 7782-44-7 > 99.5% Not Listed

### Other

#### China - Annex I & II - Controlled Chemicals Lists

- Oxygen 7782-44-7 > 99.5% Not Listed

#### China - Dangerous Goods List

- Oxygen 7782-44-7 > 99.5% UN1072; UN1073

#### China - Export Control List - Part I Chemicals

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

- Oxygen 7782-44-7 > 99.5% O; R8

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits**

- Oxygen 7782-44-7 > 99.5% Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling**

- Oxygen 7782-44-7 > 99.5% O R:8 S:(2)-17

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations**

- Oxygen 7782-44-7 > 99.5% Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**

- Oxygen 7782-44-7 > 99.5% S:(2)-17

---

**Germany**

**Environment**

**Germany - TA Luft - Types and Classes**

- Oxygen 7782-44-7 > 99.5% Not Listed

**Germany - Water Classification (VwVwS) - Annex 1**

- Oxygen 7782-44-7 > 99.5% ID Number 743, not considered hazardous to water

**Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes**

- Oxygen 7782-44-7 > 99.5% Not Listed

**Germany - Water Classification (VwVwS) - Annex 3**

- Oxygen 7782-44-7 > 99.5% Not Listed

**Other**

**Germany - Specifically Regulated Chemicals in TRGS**

- Oxygen 7782-44-7 > 99.5% Not Listed

## Mexico

### Other Mexico - Hazard Classifications

- Oxygen 7782-44-7 > 99.5% Hazard Class = 2.2 (5.1) UN1072; Hazard Class = 2.2 (5.1) UN1073

### Mexico - Regulated Substances

- Oxygen 7782-44-7 > 99.5% UN1072; UN1073

---

## Portugal

### Other Portugal - Prohibited Substances

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## United Kingdom

### Environment United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to Air

- Oxygen 7782-44-7 > 99.5% Not Listed

### United Kingdom - Substances Contained in Dangerous Substances or Preparations

- Oxygen 7782-44-7 > 99.5% Not Listed

### Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review

- Oxygen 7782-44-7 > 99.5% Not Listed

### United Kingdom - The Red List - Dangerous Substances in Water

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## United States

### Labor U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

- Oxygen 7782-44-7 > 99.5% Not Listed

**Environment**

**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - EPA - Designated Generic Categories - Warfarin and Salts**

- Oxygen 7782-44-7 > 99.5% Not Listed

---

**United States - California**

**Environment**

**U.S. - California - Proposition 65 - Carcinogens List**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - California - Proposition 65 - Developmental Toxicity**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## United States - Pennsylvania

### Labor

**U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

- Oxygen 7782-44-7 > 99.5% Not Listed

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

- Oxygen 7782-44-7 > 99.5% Not Listed

---

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

---

## Section 16 - Other Information

<b>Last Revision Date</b>	<ul style="list-style-type: none"><li>• 19/February/2013</li></ul>
<b>Preparation Date</b>	<ul style="list-style-type: none"><li>• 19/February/2013</li></ul>
<b>Disclaimer/Statement of Liability</b>	<ul style="list-style-type: none"><li>• To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.</li></ul>

---