Safety Data Sheet

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

1.1 Product identifier

Product Name: Oxygen (Refrigerated Liquid)
Synonyms: Cryogenic Liquid Oxygen; LOX
CAS Number: 7782-44-7
Product Code: 10075
EC Number: 231-956-9
Molecular Formula: \( \text{O}_2 \)

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

Relevant identified use(s): Medical and general analytical or synthetic chemical uses

1.3 Details of the supplier of the safety data sheet

Manufacturer: Air Liquide
2700 Post Oak Blvd.
Houston, TX 77056
United States
www.us.airliquide.com
sds@airliquide.com

Telephone (Technical): 713-896-2896
Telephone (Technical): 800-819-1704

1.4 Emergency telephone number

Manufacturer: 800-424-9300 - CHEMTREC
Manufacturer: +1 703-527-3887 - Outside United States

Section 2: Hazards Identification

EU/EEC

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP
- Oxidizing Gases 1 - H270
- Refrigerated Liquefied Gas - H281

DSD/DPD
- Oxidizing (O)
- R8

2.2 Label Elements

CLP

DANGER
According to OSHA 29 CFR 1910.1200 HCS

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.

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
NFPA

Section 3 - Composition/Information on Ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%(weight)</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Impurities</td>
<td>NDA</td>
<td>&lt; 0.5%</td>
<td>NDA</td>
<td>EU CLP: Not Relevant OSHA HCS 2012: Not Relevant</td>
<td>*</td>
</tr>
</tbody>
</table>

3.2 Mixtures
- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No
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 CO2.
  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
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

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Appearance/Description</th>
<th>Colorless compressed gas with no odor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Gas</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
<td>Odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Data lacking</td>
<td>Odorless</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Properties</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>-183.11 °C (-297.598 °F)</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.0002 Poise (P, Ps) or dyne-second/cm² @ 0 °C(32 °F)</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>Oxidizing gas.</td>
</tr>
</tbody>
</table>

Volatility

| Vapor Pressure       | Data lacking                  |
| Evaporation Rate     | Data lacking                  |
| Vapor Density        | 1.105 Air=1                  |
**Flammability**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not relevant</td>
</tr>
<tr>
<td>UEL</td>
<td>Not relevant</td>
</tr>
<tr>
<td>LEL</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Autoignition</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable.</td>
</tr>
</tbody>
</table>

**Environmental**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octanol/Water Partition coefficient</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Dosage</th>
<th>Route</th>
<th>Species</th>
<th>Duration</th>
<th>Results</th>
<th>Test Class</th>
<th>Target Organs</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive</td>
<td>= 10 pph</td>
<td>Inhalation</td>
<td>Rat</td>
<td>9 Hour(s)</td>
<td>TCLo</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

**GHS Properties**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>EU/CLP • Classification criteria not met</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>EU/CLP • Classification criteria not met</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>EU/CLP • Classification criteria not met</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>EU/CLP • Classification criteria not met</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>EU/CLP • Classification criteria not met</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>
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

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

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)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>MA</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Maximum Impurities</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>China</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Maximum Impurities</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Component</td>
<td>CAS</td>
<td>Japan ENCS</td>
<td>Korea KECL</td>
<td>TSCA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----</td>
<td>------------</td>
<td>------------</td>
<td>------</td>
<td></td>
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<tr>
<td>Oxygen</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Impurities</td>
<td>NDA</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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% 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
### Environment

#### 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**

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• 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

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**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

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**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

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**Section 16 - Other Information**

**Last Revision Date**

19/February/2013

**Preparation Date**

19/February/2013

**Disclaimer/Statement of Liability**

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