Safety Data Sheet



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

1.1 Product identifier

• Oxygen (0.1 - 19.5%), Desflurane (0.1 - 15%), Nitrogen (Balance)

Product Code MSDS No. 90070

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

Relevant identified use(s) • Calibration Gas

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 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

CLP • Compressed Gas - H280

DSD/DPD • Classification criteria not met

2.2 Label Elements

CLP

WARNING



Hazard statements • H280 - Contains gas under pressure; may explode if heated **Precautionary statements**

Storage/Disposal • P403 - Store in a well-ventilated place.

DSD/DPD

Risk phrases . No label element(s) required

2.3 Other Hazards

CLP

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. This preparation is not considered dangerous according to European Directive 1999/45/EC.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

Compressed Gas - H280 Simple Asphyxiant

2.2 Label elements **OSHA HCS 2012**

WARNING



Hazard statements . Contains gas under pressure; may explode if heated - H280 May displace oxygen and cause rapid suffocation.

Precautionary statements

Storage/Disposal • Store in a well-ventilated place. - P403

2.3 Other hazards

OSHA HCS 2012

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

2.2 Label elements

WHMIS



Compressed Gas - A

2.3 Other hazards

WHMIS

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

 Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

| Hazardous Components | | | | | | | |
|----------------------|---|-------------------|-----|--|---------|--|--|
| Chemical Name | nemical Name Identifiers %(weight) LD50/LC50 Classifications According to Regulation/Directive Comm | | | | | | |
| Nitrogen | CAS:7727-37-9 EINECS:231-783-9 | 65.5% TO 99.8% | NDA | EU DSD/DPD: Not Classified - Classification criteria not met EU CLP: Self Classified - Press. Gas - Comp., H280 OSHA HCS 2012: Self Classified - Press. Gas - Comp.; Simp. Asphyx. | Balance | | |
| Oxygen | CAS :7782-44-7 EC Number :231- 956-9 | 0.1% TO 19.5% | NDA | EU DSD/DPD: Annex I - O; R8 EU CLP: Annex VI - Ox. Gas 1, H270; Press. Gas Comp., H280 OSHA HCS 2012: Ox. Gas 1; Press. Gas - Comp. | NDA | | |
| Desflurane | CAS:57041-67-5 | 0.1% TO 15% | NDA | EU DSD/DPD: Self Classified - R67 EU CLP: Self Classified - STOT SE 3: Narc., H336 OSHA HCS 2012: STOT SE 3: Narc. | NDA | | |

See Section 16 for full text of H-statements and R-phrases.

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

 Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eye

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If irritation develops and persists, get medical attention. If contact with material occurs flush eyes with water.

Ingestion

 As this product is a gas, refer to the inhalation section. 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 overexposure 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.

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.

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

No special environmental precautions necessary.

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.

Personal Protective Equipment

Respiratory

• In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. Have available emergency selfcontained breathing apparatus or full-face airline respirator when using this chemical.

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.

Key to abbreviations

MSHA = Mine Safety and Health Administration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

| Material Description | | | | | |
|--|-------------------------------|------------------------|--|--|--|
| Physical Form | Gas | Appearance/Description | Desflurane has a slight ethereal odor. | | |
| Color | Data lacking | Odor | Slight ethereal odor. | | |
| Odor Threshold | Data lacking | | | | |
| General Properties | • | • | | | |
| Boiling Point | -194.5 C(-318.1 F) For Air | Melting Point | -213.4 C(-352.12 F) For Air | | |
| Decomposition Temperature | Data lacking | рН | Data lacking | | |
| Specific Gravity/Relative Density Data lacking | | Density | 1.202 kg/m³ For Air | | |
| Water Solubility Negligible < 0.1 % | | Viscosity | 0.0002 Poise (P, Ps) or dyne- second/cm2 @ 0 C(32 F) For Air | | |
| Explosive Properties | Not relevant. | Oxidizing Properties: | Not an oxidizer. | | |
| Volatility | | <u>.</u> | ··· | | |
| Vapor Pressure | Data lacking | Vapor Density | 1 Air=1 For Air | | |
| Evaporation Rate | Data lacking | | | | |
| Flammability | • | • | | | |
| Flash Point Not relevant | | UEL | Not relevant | | |
| LEL | Not relevant | Autoignition | Not relevant | | |
| Flammability (solid, gas) | Not flammable. | | | | |
| Environmental | • | <u> </u> | · | | |
| 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

Storage in poorly ventilated areas. Storage near a heat source.

10.5 Incompatible materials

Peroxides

10.6 Hazardous decomposition products

. Hydrogen fluoride.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

| Component Name | CAS | Data | | |
|----------------------------------|-----|---|--|--|
| Oxygen (0.1% TO 19.5%) 7782-44-7 | | Reproductive: ihl-rat TCLo:10 pph/9H (22D preg) | | |
| 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 | | |
| Skin sensitization | | EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met | | |
| STOT-RE | | EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met | | |
| STOT-SE | | EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met | | |
| Toxicity for Reproduction | | EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met | | |
| Respiratory sensitization | | EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met | | |
| Serious eye damage/Irritation | | EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met | | |

Route(s) of entry/exposure Potential Health Effects Inhalation

Inhalation

Acute (Immediate)

 Based upon data, desflurane may cause respiratory irritation. In high concentrations, desflurane is an anesthetic gas with narcotic effects.

Chronic (Delayed)

No data available

Skin Acute (Immediate)

Based upon data, desflurane may cause skin irritation.

Chronic (Delayed)

No data available

Eye

Acute (Immediate)
Chronic (Delayed)

- Based upon data, desflurane may cause eye irritation.
- No data available

Ingestion

Acute (Immediate)

Chronic (Delayed)

Carcinogenic Effects

- Ingestion is not considered a potential route of exposure due to the physical form of this product.
- Ingestion is not considered a potential route of exposure due to the physical form of this product.
- The components of this gas mixture are not found on the following lists: FEDERAL OSHA Z LIST, NTP and IARC; therefore, they are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

Section 12 - Ecological Information

12.1 Toxicity

Material data lacking.

12.2 Persistence and degradability

Material data lacking.

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

Material data lacking.

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 | UN1956 | Compressed gas, n.o.s. (Nitrogen, Oxygen) | 2.2 | NDA | NDA | |
| TDG | UN1956 | COMPRESSED GAS, N.O.S. (Nitrogen, Oxygen) | NDA | NDA | NDA | |
| IMO/IMDG | UN1956 | COMPRESSED GAS, N.O.S. (Nitrogen, Oxygen) | 2.2 | NDA | NDA | |

| IATA/ICAO | UN1956 | Compressed gas, n.o.s. (Nitrogen, Oxygen) | 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 | | | |
| Nitrogen | 7727-37-9 | Yes | Yes | Yes | | | |
| Oxygen | 7782-44-7 | Yes | Yes | Yes | | | |
| Desflurane | 57041-67-5 | No | No | No | | | |

| Inventory | | | | | | | | |
|-----------------------|--|-----|----|----------------|-------|-----|-----------|----|
| Component | CAS Canada DSL Canada NDSL China EU EINECS EU ELNICS | | | | | | EU ELNICS | |
| Nitrogen | 7727-37-9 | Yes | | No | Yes | Ye | S | No |
| Oxygen | 7782-44-7 | Yes | | No | Yes | Yes | | No |
| Desflurane | 57041-67-5 | No | | No | No | No | 1 | No |
| | | | | Inventory (Coi | n't.) | | | |
| Component | Component CAS Japan ENCS Korea KECL TSCA | | | | | | | |
| Nitrogen 7727-37-9 | | No | | Yes | | Yes | | |
| Oxygen 7782-44-7 | | No | | Yes | | | Yes | |
| Desflurane 57041-67-5 | | | No | | No | | No | |

Canada

⁻Labor

Canada - WHMIS - Classifications of Substances

Oxygen 7782-44-7 0.1% TO 19.5% A, C
 Nitrogen 7727-37-9 65.5% TO 99.8% A

• Desflurane 57041-67-5 0.1% TO 15% Not Listed

Canada - WHMIS - Ingredient Disclosure List

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

Environment

Canada - CEPA - Priority Substances List

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

Europe

Other

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

Oxygen 7782-44-7 0.1% TO 19.5% O; R8
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% O R:8 S:(2)-17
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% S:(2)-17
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

United States

Labor

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

Environment

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - EPA - Designated Generic Categories - Aqueous Ammonia

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

United States - California

Environment

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed

Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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United States - Pennsylvania

Labor

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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

Oxygen 7782-44-7 0.1% TO 19.5% Not Listed
 Nitrogen 7727-37-9 65.5% TO 99.8% Not Listed
 Desflurane 57041-67-5 0.1% TO 15% Not Listed

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15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

H270 - May cause or intensify fire; oxidizer
 H336 - May cause drowsiness or dizziness

R8 - Contact with combustible material may cause fire. R67 - Vapours may cause drowsiness and dizziness.

Last Revision Date

Preparation Date

Disclaimer/Statement of Liability

- 29/November/2012
- 29/November/2012
- 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.

Key to abbreviations NDA = No Data Available

Preparation Date: 29/November/2012 Revision Date: 29/November/2012