Safety Data Sheet



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

1.1 Product identifier

Product Name • Oxygen (19.5 - 23.5%), Isoflurane (0.1 - 10%), Nitrogen (Balance)

Product Code MSDS No. 90069

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

 According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous

DSD/DPD

 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

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements . Contains gas under pressure; may explode if heated - H280

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

 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	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments			
Nitrogen	CAS :7727-37-9 EINECS :231-783-9	66.5% TO 80.4%	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	19.5% TO 23.5%	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			
Isoflurane	CAS:26675-46-7 EINECS:247-897- 7	0.1% TO 10%	Ingestion/Oral-Rat LD50 • 4770 µL/kg Inhalation-Rat LC50 • 58.5 g/m³ 4 Hour(s)	EU DSD/DPD: Self Classified - R67 EU CLP: Self Classified - STOT SE 3, 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

 In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If irritation develops and persists, get medical attention.

Eye

 If contact with eyes directly, flush with gently flowing fresh water thoroughly. If eye irritation persists: Get medical advice/attention.

Ingestion

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

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.

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						
	Result	Canada Ontario				
Isoflurane (26675-46-7)	TWAs	2 ppm TWA; 15 mg/m3 TWA				

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 self-contained 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

NA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description				
Physical Form	Gas	Appearance/Description	Isoflurane has a slight ethereal odor.	
Color	Data lacking	Odor	Slight ethereal odor.	
Odor Threshold	Data lacking			
General Properties		<u>.</u>		
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 @ 59 F(15 C)	
Water Solubility	Data lacking	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	•	•		
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	•	-		
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

Preparation Date: 26/November/2012 Revision Date: 26/November/2012 None

10.6 Hazardous decomposition products

None

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name CAS		Data
Oxygen (19.5% TO 23.5%)	7782-44-7	Reproductive: ihl-rat TCLo:10 pph/9H (22D preg)
Isoflurane (0.1% TO 10%)	26675-46-7	Acute Toxicity: orl-rat LD50:4770 uL/kg; ihl-rat LC50:58.5 gm/m3/4H

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)

 A potential health hazard associated with this gas mixture is the inhalation of Isoflurane, a component of this gas mixture. Such over-exposures may occur if this gas mixture is used in a confined space or other poorly-ventilated area. Overexposures to Isoflurane can cause anesthetic effects with symptoms of dizziness, headache, nausea, respiratory arrest, coma, or unconsciousness.

Chronic (Delayed)

No data available

Acute (Immediate)

• Isoflurane, a component of this gas mixture, may be irritating to the skin.

Chronic (Delayed)

No data available

Eye

Acute (Immediate)

Isoflurane, a component of this gas mixture, may be irritating to the eye.
No data available

Chronic (Delayed)

Ingestion

Acute (Immediate)

• Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

No data available

Carcinogenic Effects

 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.

Reproductive Effects

 Isoflurane is listed by the FDA as a pregnancy category C drug. It has been shown to have a possible anesthetic-related fetotoxic effect in mice when given in doses 6 times the human dose. There are no adequate and well-controlled studies in pregnant women.

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
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DOT	UN1956	Compressed gas, n.o.s. (Nitrogen, Oxygen)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Nitrogen, Oxygen)	2.2	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		
Isoflurane	26675-46-7	No	No	No		

				Inventory				
Component	CAS	Canada D	SL	Canada NDSL	China	EU EIN	ECS	EU ELNICS
Nitrogen	7727-37-9	Yes		No	Yes	Ye	S	No
Oxygen	7782-44-7	Yes		No	Yes	Ye	S	No
Isoflurane	26675-46-7	No		No	No	Ye	S	No
				Inventory (Co	n't.)			
Component CAS Japan EN			pan ENCS	Korea KECL		1	rsca	
Nitrogen	772	27-37-9		No	Yes			Yes
Oxygen	778	32-44-7		No	Yes			Yes
Isoflurane	266	375-46-7		No	No			No

Australia

Labor

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

Oxygen 7782-44-7 19.5% TO 23.5% Not Listed

Preparation Date: 26/November/2012 Revision Date: 26/November/2012 Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Australia - High Volume Industrial Chemicals List

 Oxygen 19.5% TO 23.5% Not Listed 7782-44-7 Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Australia - List of Designated Hazardous Substances - Classification

 Oxygen 7782-44-7 19.5% TO 23.5% O R8 Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Environment -

Australia - National Pollutant Inventory (NPI) Substance List

- 7782-44-7 Oxygen 19.5% TO 23.5% Not Listed
- Nitrogen 7727-37-9 66.5% TO 80.4% 15 tonne/yr Threshold category 3 (total)
- Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Australia - Ozone Protection Act - Scheduled Substances

 Oxygen 7782-44-7 19.5% TO 23.5% Not Listed Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Australia - Priority Existing Chemical Program

 Oxygen 7782-44-7 19.5% TO 23.5% Not Listed Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Oxygen 7782-44-7 19.5% TO 23.5% A, C Nitrogen 66.5% TO 80.4% A 7727-37-9 • Isoflurane 26675-46-7 0.1% TO 10%
- Not Listed

Canada - WHMIS - Ingredient Disclosure List

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

Environment

Canada - CEPA - Priority Substances List

Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
 Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
 Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Europe

Other

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% O; R8
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% O R:8 S:(2)-17
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% S:(2)-17
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

Mexico

Other

Mexico - Hazard Classifications

- Oxygen 7782-44-7 19.5% TO 23.5% Hazard Class = 2.2 (5.1) UN1072; Hazard Class = 2.2 (5.1) UN1073
- 66.5% TO 80.4% Hazard Class = 2.2 UN1066; Hazard Class = 2.2 UN1977 Nitrogen 7727-37-9
- Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Mexico - Regulated Substances

- Oxygen 19.5% TO 23.5% UN1072; UN1073 7782-44-7 Nitrogen 7727-37-9 66.5% TO 80.4% UN1066; UN1977
- Isoflurane 26675-46-7 0.1% TO 10% Not Listed

United States

Labor

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

 Oxygen 7782-44-7 19.5% TO 23.5% Not Listed 66.5% TO 80.4% Not Listed Nitrogen 7727-37-9 • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

 Oxygen 7782-44-7 19.5% TO 23.5% Not Listed • Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

Environment

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

- Oxygen 7782-44-7 19.5% TO 23.5% Not Listed • Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed Isoflurane 26675-46-7 0.1% TO 10% Not Listed
- U.S. CERCLA/SARA Hazardous Substances and their Reportable Quantities
- Oxygen 7782-44-7 19.5% TO 23.5% Not Listed Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed • Isoflurane 26675-46-7 0.1% TO 10% Not Listed

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

 Oxygen 	7782-44-7	19.5% TO 23.5%	Not Listed
 Nitrogen 	7727-37-9	66.5% TO 80.4%	Not Listed
 Isoflurane 	26675-46-7	0.1% TO 10%	Not Listed

_

United States - California

Environment

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

United States - Pennsylvania

Labor

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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

```
    Oxygen 7782-44-7 19.5% TO 23.5% Not Listed
    Nitrogen 7727-37-9 66.5% TO 80.4% Not Listed
    Isoflurane 26675-46-7 0.1% TO 10% Not Listed
```

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
- **26/November/2012**

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- Disclaimer/Statement of Liability
- 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