#### **Safety Data Sheet**



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

1.1 Product identifier

Product Name • Nitrogen (10.0001-49%), Helium (Balance)

Product Code M-23022/E-1

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 Regulation (EC) No 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** • Not classified

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).

#### 2.4 Other information

**NFPA** 



# 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

Composition				
Chemical Name	Identifiers	%	Classifications According to Regulation/Directive	
Nitrogen	CAS:7727-37-9 EINECS:231-783-9	10.0001% TO 49%	EU DSD/DPD: None EU CLP: Self Classified: Press. Gas - Comp., H280 OSHA HCS 2012: Press. Gas - Comp.; Simp. Asphyx.	
Helium	CAS:7440-59-7 EINECS:231-168-5	Balance	EU DSD/DPD: Not Classified - Criteria not met EU CLP: Self Classified: Press. Gas - Comp. H280 OSHA HCS 2012: Press. Gas - Comp; Simple Asphyxiant	

#### **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.

Ingestion

Ingestion is not considered a potential route of exposure.

# 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. A potential health hazard associated with this gas is anoxia.

#### 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.

Unsuitable Extinguishing Media

None known.

#### 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.

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

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

#### 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.

#### 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.

#### **Exposure Control Notations**

**Portugal** 

Nitrogen (7727-37-9): Simple Asphyxiants: (Simple Asphyxiant)
 Helium (7440-59-7): Simple Asphyxiants: (Simple Asphyxiant)

Ireland

Nitrogen (7727-37-9): Simple Asphyxiants: (Asphyxiant)
 Helium (7440-59-7): Simple Asphyxiants: (Asphyxiant)

Spain

Nitrogen (7727-37-9): Simple Asphyxiants: (simple asphyxiant)
 Helium (7440-59-7): Simple Asphyxiants: (simple asphyxiant)

# 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

 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.

Eye/Face Skin/Body Wear safety glasses.

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 gas with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties	-	-	-
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	0.0068 v/v @ 20 C
Viscosity	Data lacking	Explosive Properties	Not explosive.
Oxidizing Properties:	Not an oxidizing gas.		
Volatility	•	-	-
Vapor Pressure	Data lacking	Vapor Density	0.54 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

Excess heat.

# 10.5 Incompatible materials

None

# 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

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

# Target Organs Potential Health Effects Inhalation

Acute (Immediate)

Inhalation, Skin, Eye

• This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. If this material is released in a small, poorly ventilated area (i.e. an enclosed or confined space), an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The following effects associated with decreased levels of oxygen: increase in breathing and pulse rate, emotional upset, abnormal fatigue, nausea, vomiting, collapse, loss of consciousness, convulsive movements, respiratory collapse and death.

Chronic (Delayed)

Skin

Acute (Immediate)

**Chronic (Delayed)** 

Eve

Acute (Immediate)

**Chronic (Delayed)** 

Ingestion

Acute (Immediate)

- No data available
- Under normal conditions of use, no health effects are expected.
- Under normal conditions of use, no health effects are expected.
- Under normal conditions of use, no health effects are expected.
- Under normal conditions of use, no health effects are expected.
  - Ingestion is not anticipated to be a likely route of exposure to this product.

#### **Chronic (Delayed)**

• Ingestion is not anticipated to be a likely route of exposure to this product.

# **Section 12 - Ecological Information**

### 12.1 Toxicity

This gas mixture does not present a hazard of toxicity to the environment.

#### 12.2 Persistence and degradability

 This gas mixture does not present a hazard of persistence and does not biodegrade as it contains elemental gases.

#### 12.3 Bioaccumulative potential

This gas mixture does not present a hazard of bio-accumulation.

### 12.4 Mobility in Soil

This gas mixture does not present a hazard of mobility in the soil.

#### 12.5 Results of PBT and vPvB assessment

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

#### 12.6 Other adverse effects

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

# **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. (Helium, Nitrogen)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS N.O.S., (Helium, Nitrogen)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS N.O.S., (Helium, Nitrogen)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gas, n.o.s. (Helium, Nitrogen)	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

Not relevant.

# MARPOL 73/78 and the IBC Code

# **Section 15 - Regulatory Information**

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

**SARA Hazard Classifications** • Acute, Pressure(Sudden Release of)

State Right To Know					
Component	CAS	MA	NJ	PA	
Helium	7440-59-7	Yes	Yes	Yes	
Nitrogen	7727-37-9	Yes	Yes	Yes	

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Helium	7440-59-7	Yes	No	Yes	Yes	No
Nitrogen	7727-37-9	Yes	No	Yes	Yes	No
	Inventory (Con't.)					
Component			CAS	Т	SCA	
Helium	Helium		7440-59-7 Yes		Yes	
Nitrogen		7	727-37-9		Yes	

#### Canada

Nitrogen	7727-37-9	Α
• Helium	7440-59-7	A
Canada - WHMIS - Ingredient Disclosure List		
Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed

Canada - WHMIS - Ingredient Disclosure List			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
Environment			
Canada - 2004 NPRI (National Pollutant Release Inventory)			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
Canada - 2005 NPRI (National Pollutant Release Inventory)			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
Canada - CEPA - Priority Substances List			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
Canada - DWQ (Drinking Water Quality) - IMACs			

• Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
ther		
Canada - Accelerated Reduction/Elimination of Toxics (ARET)		
• Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
ınada New Brunswick		
nvironment		
Canada - New Brunswick - Ozone Depleting Substances - Schedule A		
• Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
• Hellurii	7440-59-7	Not Listed
Canada - New Brunswick - Ozone Depleting Substances - Schedule B		
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
nina		
Environment		
China - Ozone Depleting Substances - First Schedule		
• Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
Penum	7440-59-7	Not Listed
China - Ozone Depleting Substances - Second Schedule		
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
China - Ozone Depleting Substances - Third Schedule		
• Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
Other China - Annoy I & II - Controlled Chemicals Lists		
China - Annex I & II - Controlled Chemicals Lists	7707 07 0	Not Listed
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
China - Dangerous Goods List		
Nitrogen	7727-37-9	(compressed or refrigerated liquid)
• Helium	7440-59-7	(compressed or refrigerated liquid)
China - Evnort Control Liet - Bart I Chamicale		
China - Export Control List - Part I Chemicals	7707 07 0	Not Listed
Nitrogen	7727-37-9	
Helium	7440-59-7	Not Listed
ігоре		
Other EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
	7707 07 0	Not Linted
• Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed
paration Date: 25/July/2012	Forma	t: EU CLP/REACH Language: English
vision Date: 07/October/2014		FLICIP FLIDSD/DPD OSHA HCS

Revision Date: 07/October/2014

7727-37-9	Not Listed	
7440-59-7	Not Listed	
7727-37-9	Not Listed	
7440-59-7	Not Listed	
reparations		
7727-37-9	Not Listed	
7440-59-7	Not Listed	
7727-37-9	Not Listed	
7440-59-7	Not Listed	
ı	7440-59-7 7727-37-9 7440-59-7 reparations 7727-37-9 7440-59-7	7440-59-7 Not Listed  7727-37-9 Not Listed 7440-59-7 Not Listed  reparations  7727-37-9 Not Listed 7440-59-7 Not Listed  7727-37-9 Not Listed

#### Germany

Germany - TA Luft - Types and Classes		
• Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
		ID Number 1351, not
• Nitrogen	7727-37-9	considered hazardous to
		water
• Helium	7440-59-7	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
Nitrogen	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed

Other  Germany - Specifically Regulated Chemicals in TRGS		
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed

# **Portugal**

ther	
Portugal - Prohibited Substances	
Nitrogen	7727-37-9 Not Listed
Helium	7440-59-7 Not Listed

# **United Kingdom**

Environment United Kingdom - Pollution Inventory - Schedule 1 - Thresh	olds for Releases to Air	
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed

United Kingdom - Substances Contained in Dangerous Substances or Prepare	arations		
Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
Other			
United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review	w		
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
United Kingdom - List of Dangerous Substances in Water			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
nited States			
.abor			
U.S OSHA - Process Safety Management - Highly Hazardous Chemicals			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
U.S OSHA - Specifically Regulated Chemicals			
Nitrogen	7727-37-9	Not Listed	
Helium	7440-59-7	Not Listed	
Environment U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants			
<ul><li>Nitrogen</li><li>Helium</li></ul>	7727-37-9 7440-59-7	Not Listed Not Listed	
	7440-59-7		
• Helium	7440-59-7		
Helium  U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities	7440-59-7	Not Listed	
Helium  U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantitie     Nitrogen	7440-59-7 s 7727-37-9	Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantitie</li> <li>Nitrogen</li> <li>Helium</li> </ul>	7440-59-7 s 7727-37-9	Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantitie</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> </ul>	7440-59-7  758  7727-37-9  7440-59-7	Not Listed  Not Listed  Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA II</li> </ul>	7440-59-7  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed  Not Listed  Not Listed  Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> </ul>	7440-59-7  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed  Not Listed  Not Listed  Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA II</li> </ul>	7440-59-7  758  7727-37-9  7440-59-7  7727-37-9  7440-59-7	Not Listed Not Listed Not Listed Not Listed Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA In Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs</li> </ul>	7440-59-7  7727-37-9 7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9	Not Listed  Not Listed  Not Listed  Not Listed  Not Listed  Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA In Nitrogen</li> <li>Helium</li> </ul>	7440-59-7  7727-37-9 7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9	Not Listed  Not Listed  Not Listed  Not Listed  Not Listed  Not Listed	
<ul> <li>Helium</li> <li>U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities</li> <li>Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA In Nitrogen</li> <li>Helium</li> <li>U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs</li> </ul>	7440-59-7  758  7727-37-9  7440-59-7  7727-37-9  7440-59-7  RQs  7727-37-9  7440-59-7	Not Listed	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA II Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 313 - Emission Reporting	7440-59-7  7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA II Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  Helium	7440-59-7  7727-37-9 7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9 7440-59-7	Not Listed	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA II Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 313 - Emission Reporting	7440-59-7  7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA In Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 313 - Emission Reporting Nitrogen	7440-59-7  7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA In Nitrogen Helium  U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Nitrogen Helium  U.S CERCLA/SARA - Section 313 - Emission Reporting Nitrogen Helium  U.S CERCLA/SARA - Section 313 - Emission Reporting Nitrogen Helium	7440-59-7  7440-59-7  7727-37-9 7440-59-7  RQs  7727-37-9 7440-59-7  7727-37-9 7440-59-7	Not Listed	

#### **United States - California**

nvironment			
U.S California - Proposition 65 - Carcinogens List			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
U.S California - Proposition 65 - Developmental Toxicity			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MA	DL)		
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
U.S California - Proposition 65 - Reproductive Toxicity - Female			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	
U.S California - Proposition 65 - Reproductive Toxicity - Male			
• Nitrogen	7727-37-9	Not Listed	
• Helium	7440-59-7	Not Listed	

#### **United States - Pennsylvania**

Labor		
U.S Pennsylvania - RTK (Right to Know) - Environ	mental Hazard List	
<ul> <li>Nitrogen</li> </ul>	7727-37-9	Not Listed
• Helium	7440-59-7	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special	Hazardous Substances	
Nitrogen	7727-37-9	Not Listed
Helium	7440-59-7	Not Listed

# 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

#### **Section 16 - Other Information**

Last Revision Date
Preparation Date
Disclaimer/Statement of
Liability

- 07/October/2014
- 25/July/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

Nitrogen (10.0001-49%), Helium (Balance)