

# Less than or equal to 1.0% Fluorine in Argon, Helium, Krypton, Neon, Nitrogen and/or Xenon

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 5/1/2022

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Version: 1.1

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

Product Form: Mixture

Product Name: Less than or equal to 1.0% Fluorine in Argon, Helium, Krypton, Neon, Nitrogen and/or Xenon

Product Code: N-1601

### 1.2. Intended Use of the Product

Laser Gas.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Nova Gas Technologies, Inc.

2781 Three Lakes Road

NORTH CHARLESTON, SC 29418

1-843-747-0956

[www.lasergas.com](http://www.lasergas.com)

### 1.4. Emergency Telephone Number

Emergency Number : 1-800-424-9300 or 1-703-527-3887 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Simple Asphyxiant

Compressed gas H280

Acute Tox. 4 (Inhalation:gas) H332

Full text of H-phrases: see section 16

### 2.2. Label Elements

#### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Warning

##### Hazard Statements (GHS-US)

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

H332 - Harmful if inhaled.

May displace oxygen and cause rapid suffocation.

##### Precautionary Statements (GHS-US)

: P261 - Avoid breathing vapors, mist, or spray.

P271 - Use only outdoors or in a well-ventilated area.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a poison center or doctor if you feel unwell.

P410+P403 - Protect from sunlight. Store in a well-ventilated place.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing respiratory conditions.

Contact with the product may cause cold burns or frostbite.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Argon	(CAS No) 7440-37-1	0 - 99	Simple Asphyxiant Compressed gas, H280

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Helium	(CAS No) 7440-59-7	0 - 99	Simple Asphyxiant Compressed gas, H280
Neon	(CAS No) 7440-01-9	0 - 99	Simple Asphyxiant Compressed gas, H280
Nitrogen	(CAS No) 7727-37-9	0 - 99	Simple Asphyxiant Compressed gas, H280
Krypton	(CAS No) 7439-90-9	0 - 20	Simple Asphyxiant Compressed gas, H280
Xenon	(CAS No) 7440-63-3	0 - 20	Simple Asphyxiant Compressed gas, H280
Fluorine	(CAS No) 7782-41-4	≤ 1.0	Ox. Gas 1, H270 Compressed gas, H280 Acute Tox. 1 (Inhalation:gas), H330 Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.

**First-aid Measures After Inhalation:** Move person to fresh air. Seek medical attention for discomfort or if symptoms do not subside.

**First-aid Measures After Skin Contact:** If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.

**First-aid Measures After Eye Contact:** If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.

**First-aid Measures After Ingestion:** Though risk of ingestion is extremely unlikely, in case of frostbite or freeze burns due to oral exposure seek immediate medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Harmful if inhaled. Gas can be toxic as a simple asphyxiant by displacing oxygen from the air. May cause frostbite.

**Symptoms/Injuries After Inhalation:** Harmful if inhaled. May displace oxygen and cause rapid suffocation.

**Symptoms/Injuries After Skin Contact:** May cause frostbite. Symptoms may include redness, pain, and skin burns.

**Symptoms/Injuries After Eye Contact:** Contact with gas escaping the cylinder causes frostbite, freeze burns, and permanent eye damage.

**Symptoms/Injuries After Ingestion:** Not considered a potential route of exposure, but contact with gas escaping the cylinder may cause freeze burns and frostbite.

**Chronic Symptoms:** May cause fluorosis, a bone and dental disease caused by excessive consumption of fluoride. May cause adverse effects to the lungs, kidney, liver, heart, teeth, and bone.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire. In case of fire: keep cylinders cool by spraying with water.

**Unsuitable Extinguishing Media:** Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable.

**Explosion Hazard:** Cool closed containers exposed to fire with water spray. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

**Reactivity:** May react violently with water producing toxic and corrosive vapors.

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## 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Fight fire from safe distance and protected location.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Avoid contact with the skin and the eyes. Ensure adequate ventilation: gas will displace oxygen and cause rapid suffocation in confined areas.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Eliminate ignition sources. Stop leak if safe to do so. Ensure adequate ventilation.

### 6.2. Environmental Precautions

Avoid unnecessary release into environment.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Stop leak if safe to do so.

**Methods for Cleaning Up:** Ventilate area. Check oxygen levels before reentering area. Oxygen levels should be maintained above 19.5% at sea level.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. For further information refer to section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** May cause asphyxiation. Symptoms may include loss of mobility/consciousness. Exposed person may not be aware of asphyxiation. Risk of explosion if heated under confinement. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Contact with the product may cause cold burns or frostbite.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Keep at temperatures below 52°C / 125°F.

**Storage Conditions:** Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Store tightly closed in a dry, cool and well-ventilated place. Keep valves free from grease and oil.

### 7.3. Specific End Use(s)

Laser Gas.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Fluorine (7782-41-4)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	2 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA IDLH	US IDLH (ppm)	25 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	0.1 ppm
Argon (7440-37-1)		
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content

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<b>Helium (7440-59-7)</b>		
<b>USA ACGIH</b>	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
<b>Neon (7440-01-9)</b>		
<b>USA ACGIH</b>	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
<b>Nitrogen (7727-37-9)</b>		
<b>USA ACGIH</b>	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content

## 8.2. Exposure Controls

### Appropriate Engineering Controls

: Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Oxygen detectors should be used when asphyxiating gases may be released.

### Personal Protective Equipment

: Protective goggles or safety glasses. Gloves. Protective clothing. High vapor/gas concentration: self-contained respirator.



### Materials for Protective Clothing

: Wear suitable protective clothing.

### Hand Protection

: Protective gloves.

### Eye Protection

: Chemical safety goggles or safety glasses..

### Skin and Body Protection

: Wear suitable protective clothing.

### Respiratory Protection

: Use a NIOSH-approved self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

### Thermal Hazard Protection

: If material is cold, wear thermally resistant protective gloves.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

#### Physical State

: Gas

#### Appearance

: Colorless

#### Odor

: Sharp, pungent odor that can be detected at very low levels

#### Odor Threshold

: 0.097 - 0.19 ppm for Fluorine

#### pH

: No data available

#### Evaporation Rate

: No data available

#### Melting Point/ Freezing Point at 1 atm

: Fluorine: -219.7 °C (-363.4 °F)  
 Argon: -189.2 °C (-308.6 °F)  
 Helium: None  
 Krypton: -157 °C (-251 °F)  
 Neon: -248.7 °C (-415.6 °F)  
 Nitrogen: -210 °C (-345.8 °F)  
 Xenon: -168 °C (-111 °F)

#### Boiling Point at 1 atm

: Fluorine: -188.2 °C (-306.8 °F)  
 Argon: -185.9 °C (-302.6 °F)  
 Helium: -268.9 °C (-452.1 °F)  
 Krypton: -153.4 °C (-244.0 °F)  
 Neon: -246.0 °C (-410.9 °F)  
 Nitrogen: -195.8 °C (-320.4 °F)  
 Xenon: -108.2 °C (-162.6 °F)

#### Flash Point

: No data available

#### Auto-ignition Temperature

: No data available

#### Decomposition Temperature

: No data available

#### Flammability (solid, gas)

: No data available

#### Vapor Pressure

: No data available

#### Relative Vapor Density at 20 °C

: No data available

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<b>Specific Gravity (Air = 1) at 21.1°C (70°F)</b>	: Fluorine: 1.312 Argon: 1.38 Helium: 0.135 Krypton: 2.899 Neon: 0.696 Nitrogen: 0.906 Xenon: 4.56
<b>Solubility in Water vol/vol at 0°C (32 °F) and 1 atm</b>	: Fluorine: Reacts Violently Argon: 0.056 Helium: 0.0094 Krypton: 0.0594 Neon: 0.0105 Nitrogen: 0.023 Xenon: 0.108
<b>Partition Coefficient: N-Octanol/Water</b>	: No data available
<b>Viscosity</b>	: No data available
<b>Gas Density at 21.1 °C (70 °F)</b>	: Fluorine: 0.098 lb/ft <sup>3</sup> (1.57 kg/m <sup>3</sup> ) Argon: 0.103 lb/ft <sup>3</sup> (1.650 kg/m <sup>3</sup> ) Helium: 0.0103 lb/ft <sup>3</sup> (0.165 kg/m <sup>3</sup> ) Krypton: 0.2172 lb/ft <sup>3</sup> (3.479 kg/m <sup>3</sup> ) Neon: 0.05215 lb/ft <sup>3</sup> (0.83536 kg/m <sup>3</sup> ) Nitrogen: 0.072 lb./ft <sup>3</sup> (1.153 kg/m <sup>3</sup> ) Xenon: 0.3416 lb/ft <sup>3</sup> (5.472 kg/m <sup>3</sup> )
<b>Specific Volume at 21.1 °C (70 °F)</b>	: Fluorine: 10.17 ft <sup>3</sup> /lb (0.635 m <sup>3</sup> /kg) Argon: 9.71 ft <sup>3</sup> /lb (0.606 m <sup>3</sup> /kg) Helium: 97.09 ft <sup>3</sup> /lb (6.061 m <sup>3</sup> /kg) Krypton: 4.604 ft <sup>3</sup> /lb (0.287 m <sup>3</sup> /kg) Neon: 19.18 ft <sup>3</sup> /lb (1.197 m <sup>3</sup> /kg) Nitrogen: 13.8 ft <sup>3</sup> /lb (0.867 m <sup>3</sup> /kg) Xenon: 2.927 ft <sup>3</sup> /lb (0.183 m <sup>3</sup> /kg)
<b>Critical Pressure</b>	: Fluorine: 756.4 psia (5215 kPa) Argon: 711.5 psia (4905 kPa) Helium: 33.0 psia (227 kPa abs) Krypton: 798.0 psia (5502 kPa abs) Neon: 384.9 psia (2654 kPa abs) Nitrogen: 492.9 psia (3399kPa abs) Xenon: 847.0 psia (5840kPa abs)
<b>Molecular Weight</b>	Fluorine: 38.00 Argon: 39.95 Helium: 4.00 Krypton: 83.80 Neon: 20.183 Nitrogen: 28.01 Xenon: 131.3

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** May react violently with water producing toxic and corrosive vapors.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Moisture. Sparks, heat, open flame and other sources of ignition. Incompatible materials.
- 10.5. Incompatible Materials:** Reacts violently with water. Oxidizers. Reducing agents. Ammonia. Metals.
- 10.6. Hazardous Decomposition Products:** Highly toxic and corrosive gases. Decomposes in water, producing hydrofluoric acid, hydrogen fluoride, oxygen fluoride, hydrogen peroxide, oxygen, and ozone.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Inhalation:gas: Harmful if inhaled.

Fluorine (7782-41-4)	
LC50 Inhalation Rat	185 ppm/1h
ATE (Gases)	92.50 ppmV/4h

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Harmful if inhaled. May displace oxygen and cause rapid suffocation

**Symptoms/Injuries After Skin Contact:** May cause frostbite. Symptoms may include redness, pain, and skin burns

**Symptoms/Injuries After Eye Contact:** Contact with gas escaping the cylinder causes frostbite, freeze burns, and permanent eye damage.

**Symptoms/Injuries After Ingestion:** Not considered a potential route of exposure, but contact with gas escaping the cylinder may cause freeze burns and frostbite.

**Chronic Symptoms:** May cause fluorosis, a bone and dental disease caused by excessive consumption of fluoride. May cause adverse effects to the lungs, kidney, liver, heart, teeth, and bone.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

**12.2. Persistence and Degradability** No additional information available

**12.3. Bioaccumulative Potential** No additional information available

**12.4. Mobility in Soil** No additional information available

**12.5. Other Adverse Effects** No additional information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Additional Information:** Dispose of empty container in accordance with all local regulations. Recycle or recondition if possible. Empty gas cylinders should be returned to the vendor for recycling or refilling.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

**Proper Shipping Name** : COMPRESSED GAS, N.O.S. (\*)

**Hazard Class** : 2.2

**Identification Number** : UN1956

**Label Codes** : 2.2

**ERG Number** : 126



### 14.2. In Accordance with IMDG

**Proper Shipping Name** : COMPRESSED GAS, N.O.S. (\*)

**Hazard Class** : 2.2

**Identification Number** : UN1956

**Label Codes** : 2.2

**EmS-No. (Fire)** : F-C

**EmS-No. (Spillage)** : S-V



### 14.3. In Accordance with IATA

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**Proper Shipping Name** : COMPRESSED GAS, N.O.S. (\*)  
**Identification Number** : UN1956  
**Hazard Class** : 2.2  
**Label Codes** : 2.2  
**ERG Code (IATA)** : 2L



\* Indicate technical name of contents per applicable regulations, including fluorine.

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

All components listed in Section 3 appear on the United States TSCA (Toxic Substances Control Act) inventory.

<b>Less than or equal to 1.0% Fluorine in Argon, Helium, Krypton, Neon, Nitrogen and/or Xenon</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Sudden release of pressure hazard
<b>Fluorine (7782-41-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Listed on United States SARA Section 313	
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	500
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Sudden release of pressure hazard
<b>SARA Section 313 - Emission Reporting</b>	1.0 %

### 15.2 US State Regulations

The components listed in Section 3 but not listed below do not appear on any state Right to Know lists.

<b>Fluorine (7782-41-4)</b>
U.S. - Colorado - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities
U.S. - Delaware - Accidental Release Prevention Regulations - Threshold Quantities
U.S. - Delaware - Accidental Release Prevention Regulations - Toxic Endpoints
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Illinois - Toxic Air Contaminants
U.S. - Louisiana - Reportable Quantity List for Pollutants
U.S. - Massachusetts - Drinking Water - Maximum Contaminant Levels (MCLs)
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
RTK - U.S. - Massachusetts - Right To Know List
U.S. - Massachusetts - Toxics Use Reduction Act
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Michigan - Polluting Materials List
U.S. - Michigan - Process Safety Management Highly Hazardous Chemicals
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - Nebraska - "P" Listed Hazardous Wastes
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
U.S. - New Jersey - Environmental Hazardous Substances List
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS)
U.S. - New York - Occupational Exposure Limits - TWAs

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U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - North Dakota - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues  
U.S. - Ohio - Accidental Release Prevention - Threshold Quantities  
U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Hazardous Waste - Acutely Hazardous Wastes  
U.S. - Vermont - Hazardous Waste - Hazardous Constituents  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List  
U.S. - Washington - Dangerous Waste - Discarded Chemical Products List  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet  
U.S. - Wyoming - Process Safety Management - Highly Hazardous Chemicals

## **Argon (7440-37-1)**

RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Washington - Permissible Exposure Limits - Simple Asphyxiants

## **Helium (7440-59-7)**

RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Washington - Permissible Exposure Limits - Simple Asphyxiants

## **Neon (7440-01-9)**

RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Washington - Permissible Exposure Limits - Simple Asphyxiants

## **Nitrogen (7727-37-9)**

U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Minnesota - Hazardous Substance List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Washington - Permissible Exposure Limits - Simple Asphyxiants



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## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 06/11/2015  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 1 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 1
Acute Tox. 4 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 4
Compressed gas	Gases under pressure Compressed gas
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Ox. Gas 1	Oxidizing gases Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H270	May cause or intensify fire; oxidizer
H280	Contains gas under pressure; may explode if heated
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H332	Harmful if inhaled
Simple Asphyxiant	May displace oxygen and cause rapid suffocation

### NFPA Health Hazard

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

### NFPA Fire Hazard

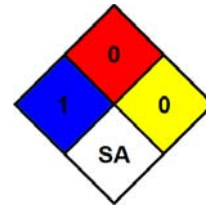
: 0 - Materials that will not burn.

### NFPA Reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

### NFPA Specific Hazard

: SA - This denotes gases which are simple asphyxiants. The only gases for which this symbol is permitted are nitrogen, helium, neon, argon, krypton, and xenon.



### HMIS III Rating

#### Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

#### Flammability

: 0 Minimal Hazard

#### Physical

: 3 Serious Hazard

*The information contained in this SDS is believed to be correct as of the date issued and is intended to describe the product for the purposes of health, safety and environmental requirements only. The supplier assumes no liability for the accuracy or completeness of this information and does not guarantee that these are the only hazards that may exist. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to determine the suitability of any product for his/her use or application.*

SDS US (GHS HazCom)