

Issue date March 1, 2015

Reviewed date October 1, 2020

# **Safety Data Sheet**

**SDS ID# 2005** 

#### **Section 1. IDENTIFICATION**

#### 1.1. Product identifier

Product form : Mixture

Product name : Air, Compressed

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

Product use : Calibration gas/Bumptest gas/Function test gas

#### 1.3. Details of the supplier of the safety data sheet

Intermountain Specialty Gases

520 N. Kings Road Nampa, ID 83687

Telephone 1-208-466-9425 or Toll free 1-800-552-5003

Fax 1-208-466-9144 www.isgases.com

# 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

#### Section 2. HAZARDS INDENTIFICATION

#### 2.1. Classification of the substance or mixture

**Classification** : GASES UNDER PRESSURE - Compressed gas

# 2.2. Label elements

# **Hazard pictograms**



Signal word : WARNING

Hazard statements : H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED

: CGA-HG24 - MAY SUPPORT COMBUSTION

**Precautionary statements** 

[General] : Read and follow all Safety Data Sheets (SDS's) before use. Read label before use. Keep

out of reach of children. If medical advice is needed, have a product container or label at

hand. Use equipment rated for cylinder pressure.



[Prevention] : P202 - Do not handle until all safety precautions have been read and understood

: P271+P403- Use only outdoors or in a well-ventilated area

[Response] : Not applicable

[Storage] : CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)

[Disposal] : Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity

No data available

## Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Not applicable

Name	Product Identifier	%
Nitrogen	(CAS No) 7727-37-9	76.5 - 80.5
Oxygen	(CAS No) 7782-44-7	19.5 - 23.5

# Section 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

General : IF exposed or concerned: Get medical advice/attention.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. If you

feel unwell, seek medical advice.

Skin contact : Adverse effects not expected from this product. Eye contact : Adverse effects not expected from this product.

Ingestion : Ingestion is not considered a potential route of exposure, refer to the inhalation

section.

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

**Acute** 

Inhalation : No know significant effects or critical hazards

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite. Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : Ingestion is not considered a potential route of exposure, refer to the inhalation

section.

Frostbite : Thaw frosted parts with lukewarm water. Do not rub affected areas. Get immediate

medical advice/attention.

Symptoms/injuries upon intravenous

administration

: Not known.

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Chronic symptoms : Adverse effects not expected from this product.

Delayed : Adverse effects not expected from this product.

# 4.3. Indication of any immediate medical attention and special treatment needed

If victim feels unwell, seek medical advice. If breathing is difficult, give artificial respiration or oxygen by trained personnel.

#### **Section 5. FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known

# 5.2. Special hazards arising from the substance or mixture

Fire hazard : The product is not flammable

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing

risk of burns and injuries.

Reactivity : None known.

# 5.3. Advice for fire-fighters

Firefighting instructions : In case of fire: Evacuate all personnel from the danger area. Stop the leak and flow

of gas before extinguishing fire, if safe to do so. If this is not possible, withdraw from area and allow fire to burn. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Let the fire burn. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Exercise

caution when fighting any chemical fire.

Protection during firefighting : Standard protective clothing and equipment (e.g., Self Contained Breathing

Apparatus, SCBA) for fire fighters. Do not enter fire area without proper protective

equipment, including respiratory protection.

#### Section 6. ACCIDENTAL RELEASE MEASURES

# **6.1.** Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

**6.1.1.** For non -emergency personnel

Protective equipment : Wear protective equipment consistent with the site emergency plan.

Emergency procedures : Escape the danger area by the closest safe route. Close doors and windows of

adjacent premises. Keep containers closed. Mark the danger area. Seal off low-lying

areas. Keep upwind.

6.1.12. For emergency responders

Protective equipment : Standard protective clothing and equipment (e.g., Self Contained Breathing

Apparatus) for fire fighters. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate and limit access. Ventilate area. See information above "For non-

emergency personnel".

# 6.2. Methods and material for containment and cleaning up

For containment : Immediately contact emergency personnel. Try to stop gas leak if safe to do so.

Methods for cleaning up :Dispose of content and/or container in accordance with local, regional, national,

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and/or international regulations.

#### Section 7. HANDLING AND STORAGE

# 7.1. Precautions for safe handling

Precautions for safety handling : Pressurized container: Do not pierce or burn, even after use. Use equipment rated

for cylinder pressure. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Protect cylinders from physical damage; do

not drag, roll, slide, or drop.

Hygiene measures : Do not eat, drink or smoke when using this product.

# 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : None known.

Storage conditions : Do not expose to temperatures exceeding 52°C (125°F). Store locked up. Keep

containers closed when not in use. Protect cylinder from physical damage. Store in

well ventilated area.

Incompatible products : None known. Incompatible materials : None known.

# Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Nitrogen (7727-37-9)					
OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH 2015 TLV	
ppm	mg/m³	(as of 4/26/13)	(as of 4/26/13)	1	
		8-hour TWA	up to 10-hour TWA	8-hour TWA	
		(ST) STEL	(ST) STEL	(ST) STEL	
		(C) Ceiling	( C ) Ceiling	(C) Ceiling	
There are no specific exposure limits for Nitrogen. Nitrogen is a simple asphyxiant (SA). Oxygen levels			Simple asphyxiant		
should be maintained above 19.5%.					

Oxygen (7782-44-7)					
OSF	IA PEL	Cal/OSHA PEL	NIOSH REL	ACGIH 2015 TLV	
ppm	mg/m³	(as of 4/26/13)	(as of 4/26/13)		
		8-hour TWA	up to 10-hour TWA	8-hour TWA	
		(ST) STEL	(ST) STEL	(ST) STEL	
		(C) Ceiling	( C ) Ceiling	(C) Ceiling	

There are no specific exposure limits for Nitrogen. Nitrogen is a simple asphyxiant (SA). Oxygen levels should be maintained above 19.5%.

# **8.2.** Appropriate engineering controls

Engineering measures/controls : Provide adequate general and local exhaust ventilation. Systems under pressure

should be regularly check for leakages. Ensure exposure is below occupational exposure limits. Oxygen detectors should be used when asphyxiating gases may me

released. Consider work permit system e.g. for maintenance activities.



# 8.3. Individual protection measures

Hand protection : Wear working gloves when handling gas containers. 29CFR 1910.138: Hand Protection.

Eye protection : Wear safety glasses with side shields. 29 CFR 1910.133: Eye and Face Protection.

Skin and body protection : Wear suitable protective clothing, e.g.-Lab coats, coveralls or flame resistant clothing.

Respiratory protection : None necessary during normal and routine operations. See sections 5&6.

Thermal hazard protection : None necessary during normal and routine operations.

Environmental exposure controls : Refer to local regulations for restriction of emissions to the atmosphere. See section

13 for specific methods for waste gas treatment.

Other information : Wear safety shoes while handling containers. 29 CFR 1910.136: Foot Protection

#### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Exposure controls

Appearance : Clear, colorless gas.

Physical state : Gas
Color : Colorless

Odor : No data available
Odor threshold : No data available
pH : No data available

Melting point : Not applicable for gas-mixtures.

Freezing point : -216.2 °C Boiling point : -194.3 °C

Flash point : No data available Evaporation rate : No data available

Flammability (solid, gas) : Not Flammable - not combustible
Upper flammability : Not Flammable - not combustible
Lower flammability : Not Flammable - not combustible

Vapor pressure : Not applicable
Vapor density at 20°C : No data available

Relative density : 1.2 kg/m<sup>3</sup>

Relative gas density : Lighter or similar to air
Solubility : No data available
Partition coefficient : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : Not applicable

#### **Section 10. STABILITY AND REACTIVITY**

#### 10.1. Reactivity

No reactivity hazard other than the effects described below.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available.

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#### 10.4. Conditions to avoid

No additional information available.

#### 10.5. Incompatible materials

No additional information available.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

## 11.1. Information on routes of exposure

Inhalation : Not classified

Skin contact : Adverse effects not expected from this product Eye contact : Adverse effects not expected from this product

Ingestion : Ingestion is not considered a potential route of exposure

Intravenous administration : Not known

Chronic symptoms : Adverse effects not expected from this product

#### 11.2. Symptoms related to physical, chemical and toxicological characteristics

**Symptoms** 

Simple asphyxiant. May cause suffocation by displacing the oxygen in the air. Exposure to oxygen-deficient atmosphere (<=18%) may cause dizziness, drowsiness,

nausea, vomiting, excess salivation, diminished mental alertness, loss of

consciousness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help or protect themselves. Lack of sufficient oxygen may cause serious injury

or death.

# 11.3. Delayed and immediate effects

Skin corrosion/irritation : Contact with rapidly expanding gas may cause burns or frostbite.

Serious eye damage/irritation : Contact with rapidly expanding gas may cause burns or frostbite.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Not applicable for gases and gas-mixtures

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# 11.4. Carcinogenic effects

The components of this material 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. Aquatic Toxicity

Ecology - general : No ecological damage caused by this product

## 12.2. Persistence and degradability

No information available for the product

#### 12.3. Bioaccumulative potential

No information available for the product

# 12.4. Mobility in soil

No information available for the product

#### 12.5. Other

No information available for the product

# **Section 13. DISPOSAL CONSIDERATIONS**

## 13.1. Disposal methods

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

# **Section 14. TRANSPORATION INFORMATION**

	US DOT	TDG	IMDG	IATA
UN#	UN 1002	UN 1002	UN 1002	UN 1002
Proper shipping name	Air, compressed	Air, compressed	Air, compressed	Air, compressed
Transport hazard class(es)	2.2 NON-FLAMMABLE GAS	2.2 NON-FLAMMABLE GAS	2.2 NON-FLAMMABLE GAS 2	2.2 NON-FLAMMABLE GAS
Packing group	-	-	-	-
Environment	No.	No.	No.	No.

# Section 15. REGULATORY INFORMATION

# 15.1. US Federal regulations

# SARA 311/312 hazard categories

Acute Health : No Chronic Health : No



Fire : No
Pressure : Yes
Reactive : No

This product does not contain toxic chemicals subject to reporting requirements of section 313 of the Emergency planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372.

SARA 311/312 Sudden Release of Pressure Hazard

#### 15.2. US State regulations

# Nitrogen (007727-37-9)

U.S. - Massachusetts - Right To Know List

U.S. - Minnesota - Right To Know Hazardous Substance List

U.S. - New Jersey - Right To Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right To Know) List

#### Oxygen (007782-44-7)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right To Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right To Know) List

#### **Section 16. OTHER INFORMATION**

Date of issue/Date of revision 10/1/2020

**Revision Note** 

# **Hazardous Material Information System (USA)**

Hazard Scale : 0 = Minimal/ 1 = Slight/ 2 = Moderate/ 3 = Serious/ 4 = Severe

Health : 0
Fire : 0
Physical hazards : 0

#### Key/Legend

SARA Superfund Amendments and Reauthorization Act
OSHA Occupational Safety and Health Administration

DOT Department of Transportation
TSCA Toxic Substance Control Act
NTP National Toxicology Program

ACGIH American Conference of Governmental Industrial Hygienists

PEL Permissible Exposure Limit
STEL Short Term Exposure Limit
TLV Threshold Limit Value

TDG Transportation of Dangerous Goods

CAS Chemical Abstracts Service

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

IATA International Air Transport Association
IMDG International Maritime Dangerous Goods



TWA Time Weighted Average

Prop Proposition

ATE Acute Toxicity Estimate

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