Safety Data Sheet

Product Identifier:: Air, Compressed **SDS ID: 010**

* * *Section 1 - IDENTIFICATION* * *

Material Name
Air, Compressed
Synonyms
SCBA Cylinder; Compressed Air Cylinder (This SDS applies to ALL MSA SCBA compressed air cylinders)

Recommended Use SCBA Cylinder
Restrictions on Use None known.

Manufacturer Information
Mine Safety Appliances Company
1000 Cranberry Woods Drive
Cranberry Township, PA 16066

Canada Supplier:
MSA Safety Sales, LLC
U23 - 100 Westmore Dr.
Etobicoke, ON M9V 5C3
Canada

Phone: (724) 776-8900

Emergency # (800) 255-3924

* * *Section 2 - HAZARD(S) IDENTIFICATION* * *

Classification in accordance with 29 CFR 1910.1200.
Gas under pressure; Compressed Gas
GHS LABEL ELEMENTS
Symbol(s)



Signal Word
WARNING
Hazard Statement(s)
Contains gas under pressure; may explode if heated
Precautionary Statement(s)
Prevention
None needed according to classification criteria.
Response
None needed according to classification criteria.
Storage
Protect from sunlight. Store in a well-ventilated place.
Disposal
Dispose of in accordance with applicable regulations.
Hazard(s) Not Otherwise Classified
May cause frostbite upon sudden release of compressed gas.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS	Component	Percent
7727-37-9	Nitrogen	79
7782-44-7	Oxygen	21

* * *Section 4 - FIRST-AID MEASURES* * *

Description of Necessary Measures

Inhalation

If adverse effects occur, remove to uncontaminated area. Get medical attention.

Skin Contact

If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.

Eye Contact

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion

It is unlikely that first aid will be required.

Most Important Symptoms/Effects

Acute

frostbite

Delayed

No information on significant adverse effects.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

* * *Section 5 - FIRE-FIGHTING MEASURES* * *

Suitable Extinguishing Media

carbon dioxide, regular dry chemical

Large fires: Use water spray, fog or regular foam.

Unsuitable Extinguishing Media

None known.

Special Hazards Arising from the Chemical

Product is nonflammable but will support and may accelerate combustion. Containers may rupture or explode if exposed to heat.

Hazardous Combustion Products

Combustion: miscellaneous decomposition products

Fire Fighting Measures

Move container from fire area if it can be done without risk. Fire involving tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with water spray until well after the fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. Damaged cylinders should be handled only by specialists.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Avoid contact with combustible materials. Ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. If leaking occurs, empty cylinder and remove from service. See SCBA Level II Maintenance Procedures for proper repair. If not certified to perform level II procedures, return cylinder to MSA Service Center.

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Keep away from clothing and other combustible materials.

Conditions for Safe Storage, including any Incompatibilities

Store in accordance with all current regulations and standards. Store in a well-ventilated place. Protect from sunlight. Protect from physical damage. Avoid heat, flames, sparks and other sources of ignition. Store in a clean, cool, dry place. Store below 125 °F. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.

Incompatibilities: combustible materials

* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Appropriate Engineering Controls

Based on available information, additional ventilation is not required. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.

Glove Recommendations

Wear insulated gloves.

Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Gas	**Appearance:**	colorless gas
Color:	colorless	**Physical Form:**	gas
Odor:	odorless	**Odor Threshold:**	Not available
pH:	Not available	**Melting Point:**	Not available
Boiling Point:	-194.4 °C	**Flash Point:**	non-flammable
Decomposition:	Not available	**Evaporation Rate:**	Not available
OSHA Flammability Class:	non-flammable	**LEL:**	Not available
UEL:	Not available	**Vapor Pressure:**	Not available
Vapor Density (air = 1):	1	**Density:**	Not available
Specific Gravity (water = 1):	Not available	**Water Solubility:**	1.87 % by volume @ 20 °C
Coeff. Water/Oil Dist:	Not available	**Auto Ignition:**	Not available
Viscosity:	Not available		

* * *Section 10 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid contact with combustible materials. Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.

Incompatible Materials

combustible materials

Hazardous Decomposition Products

None known.

Hazardous Decomposition

Combustion: miscellaneous decomposition products

* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Information on Likely Routes of Exposure

Inhalation

No information on significant adverse effects.

Ingestion

No information on significant adverse effects.

Skin Contact

No information on significant adverse effects.

Eye Contact

No information on significant adverse effects.

Immediate Effects

frostbite

Delayed Effects

No information on significant adverse effects.

Medical Conditions Aggravated by Exposure

No data available.

Irritation/Corrosivity Data

No data available.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Germ Cell Mutagenicity

No data available.

Carcinogenicity

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No significant target effects reported.

Specific Target Organ Toxicity - Repeated Exposure

No significant target effects reported.

Aspiration Hazard

Not expected to be an aspiration hazard.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity

No information available for the product.

Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

Persistence and Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility

No information available for the product.

Bioconcentration

No information available for the product.

Biodegradation

No information available for the product.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Dispose in accordance with all applicable regulations. Do not puncture or incinerate container.

Disposal of Contaminated Packaging

Dispose in accordance with all applicable regulations.

* * *Section 14 - TRANSPORT INFORMATION* * *

US DOT Information

Shipping Name: Air, compressed
UN/NA #: UN1002 **Hazard Class:** 2.2
Required Label(s): 2.2

TDG Information

Shipping Name: Air, compressed
UN #: UN1002 **Hazard Class:** 2.2
Required Label(s): 2.2

Marine Pollutant

No component(s) of this material is specifically listed in the IMDG Code as an identified marine pollutant.

* * *Section 15 - REGULATORY INFORMATION* * *

U.S. Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute Health: No **Chronic Health:** No **Fire:** Yes **Pressure:** Yes **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Nitrogen	7727-37-9	No	Yes	Yes	Yes	Yes
Oxygen	7782-44-7	No	Yes	No	Yes	Yes

Not regulated under California Proposition 65

Canada Regulations

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS Classification A, C.

Chemical Inventory Listings

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Nitrogen	7727-37-9	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Oxygen	7782-44-7	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes

* * *Section 16 - OTHER INFORMATION* * *

NFPA Ratings: Health: 0 **Fire:** 0 **Reactivity:** 0

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

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

The information contained in this document express our current knowledge and experience, however cannot imply guarantee of any nature. Considering the variety of factors that can affect their process or application, the information on this sheet does not exempt the processors from the responsibility of executing their own tests and experiments.