**Section 1 - IDENTIFICATION**

**Material Name**
Air, Compressed

**Synonyms**
SCBA Cylinder; Compressed Air Cylinder (see MSA part numbers listed in Annex A)

**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 Toronto
5535 Eglinton Avenue West #222
Toronto ON M9C 5K5 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)**

![Symbol Image]

**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**

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<td>Oxygen</td>
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Issue Date: 11/25/2019    Revision 1.006
**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

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**

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<td>OSHA Flammability Class:</td>
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**Appearance:**
- physical form: gas
- odor: odorless
- odor threshold: Not available
- color: colorless

**Physical and Chemical Properties**

**Boiling Point:** -194.4 °C

**Decomposition:** Not available

**Vapor Density (air = 1):** Not available

**Specific Gravity (water = 1):** Not available

**Water Solubility:** 1.87 % by volume @ 20 °C

**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:

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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

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**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 L.Ists™ - 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.
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