



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Carbon Dioxide / Oxygen / Nitrogen mix 1

Product No.: 5007

Manufacturer Name:
nexAir, LLC
1385 Corporate Avenue
Memphis, TN 38132
1-800-737-0037

Emergency Telephone:
800-627-5656

Transport ER Ph. (inside NA): 800-424-9300
(Chemtrec)

Non-emergency Telephone:

EHS Hotline: 800-737-0037

Intended Use: Gas

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Compressed Gas

Color: Colorless

Odor: None

CAUTION!

Gas reduces oxygen available for breathing.

Compressed gas.

Potential Health Effects

Inhalation: Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels. Due to oxygen deficiency inhalation of gas may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness.

Eye Contact: Direct contact with cold gas may cause eye damage from frostbite.

Skin Contact: Contact with cold gas might cause frostbites, in some cases with tissue damage.

Ingestion: This material is a gas under normal atmospheric conditions and ingestion is unlikely.

Target Organ(s): | Eye | Skin |

Potential Physical / Chemical Effects: Inert gas and/or simple asphyxiant. Reduces oxygen available for breathing. If the cylinders are heated it will cause rise in pressure with risk of bursting. Contact with compressed gas can cause damage (frostbite) due to rapid evaporative cooling.

OSHA Regulatory Status: This product is hazardous according to OSHA 29CFR 1910.1200.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration*
†Nitrogen	7727-37-9	75 - 94%
†Oxygen	7782-44-7	1 - 16%
†Carbon dioxide	124-38-9	4 - 10%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

† This chemical is hazardous according to OSHA/WHMIS criteria.

4 FIRST AID MEASURES

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Eye Contact: If frostbite occurs, immediately flush eyes with plenty of warm water (not exceeding 105°F/41°C) for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

Skin Contact: If frostbite occurs, immerse affected area in warm water (not exceeding 105°F/41°C). Keep immersed for 20 to 40 minutes. Get medical attention immediately.

Ingestion: This material is a gas under normal atmospheric conditions and ingestion is unlikely.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: Not applicable.

Special Fire Fighting Procedures: Evacuate area. Remove pressurized gas cylinders from the immediate vicinity. Cool containers exposed to flames with water until well after the fire is out.

Unusual Fire & Explosion Hazards: Containers can burst violently when heated, due to excess pressure build-up.

Hazardous Combustion Products: None

Protective Measures: Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: If leakage cannot be stopped, evacuate area. Check oxygen content before entering the area. Avoid contact with cold gas. Wear appropriate personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Spill Cleanup Methods: Ventilate well, stop flow of gas or liquid if possible. Allow gas to evaporate.

7	HANDLING AND STORAGE
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Handling: Open valve slowly. Control oxygen content in the workplace as described in section 8 of the MSDS. Secure that cylinders are not exposed to heat. Avoid contact with eyes, skin, and clothing.

Storage: Keep container tightly closed in a cool, well-ventilated place. Secure cylinders in an upright position at all times, close all valves when not in use. Secure cylinders from falling or being knocked over. Store away from incompatible materials.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
Carbon dioxide	ACGIH	STEL	30000 ppm	
Carbon dioxide	ACGIH	TWA	5000 ppm	
Carbon dioxide	NIOSH Guide	IDLH	40000 ppm	
Carbon dioxide	US. OSHA Table Z-1	TWA	5000 ppm 9000 mg/m ³	
Nitrogen	ACGIH	Limit value not established	0 Not Available	Simple asphyxiant.

Consult Canadian Provincial Regulations and/or Mexican Regulations on exposure limits, if applicable.

Engineering Controls: Make sure the area is well-ventilated and sufficient oxygen (19.5%) exists before entry. Good general ventilation (typically 10 air changes per hour) 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.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Use positive pressure air supplied respirator for uncontrolled releases. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Seek advice from supervisor on the company's respiratory protection standards.

Eye Protection: Risk of contact: Wear approved safety goggles.

Hand Protection: Thermally protective gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Skin Protection: Wear appropriate clothing to prevent freezing of skin.

Hygiene Measures: Practice good housekeeping.

Environmental Exposure Controls: Environmental manager must be informed of all major spillages.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: Colorless

Odor: None

Odor Threshold: No data available.

Physical State: Compressed Gas

pH: Not applicable

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: No data available.

Flash Point: Not applicable.

Evaporation Rate: Not applicable.

Flammability Limit - Upper (%): No data available.

Flammability Limit - Lower (%): No data available.

Vapor Pressure: No data available.

Vapor Density (Air=1): No data available.

Specific Gravity: No data available.

Solubility in Water: No data available.

Solubility (Other): No data available.

Partition Coefficient (n-Octanol/water): No data available.

Autoignition Temperature: No data available.

Decomposition Temperature: Not applicable.

Viscosity: Not applicable.

Percent Volatile: 100 %vol

10	STABILITY AND REACTIVITY
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Stability: Stable.

Conditions to Avoid: Heat may cause the containers to explode.

Incompatible Materials: Metal powders. Alkali metals. Strong bases.

Hazardous Decomposition Products: None.

11	TOXICOLOGICAL INFORMATION
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Specified Substance(s)

Other Acute: Carbon dioxide stimulates respiration at low concentrations. At high concentrations it causes respiratory depression.

Listed Carcinogens: None.

Product Information

Acute Toxicity: Contact with liquefied gas can cause damage (frostbite) due to rapid evaporative cooling.

Chronic Toxicity: No data available.

12	ECOLOGICAL INFORMATION
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Ecotoxicity: Not relevant.

Mobility: Not relevant, due to the form of the product.

Persistence and Degradability: Not relevant.

Bioaccumulation Potential: Not relevant.

13	DISPOSAL CONSIDERATIONS
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General Information: The packaging should be collected for reuse.

Disposal Methods: Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14	TRANSPORT INFORMATION
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DOT

UN No.: UN1956

Proper Shipping Name: Compressed gas, n.o.s. (Nitrogen and oxygen)

Class: 2.2

Packing Group: (N/A)

Label(s): 2.2

TDG

UN No.: UN1956

Proper Shipping Name: COMPRESSED GAS, N.O.S. (Nitrogen and oxygen)

Class: 2.2

Packing Group: (N/A)

IATA

UN No.: UN1956

Proper Shipping Name: Compressed gas, n.o.s. (Nitrogen and oxygen)

Class: 2.2

Packing Group: (N/A)

Label(s): Non-flamm. gas

IMDG

UN No.: UN1956

Proper Shipping Name: COMPRESSED GAS, N.O.S. (Nitrogen and oxygen)

Class: 2.2

Packing Group: (N/A)

EmS No.: F-C, S-V

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: A

Mexican Dangerous Statement: This product is dangerous according to Mexican regulations.

Inventory Status

This product or all components are listed or exempt from listing on the following inventory: DSL, TSCA

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

Section 311/312 (40 CFR 370):

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372): Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA

TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.

TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E): Not regulated.

TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**Massachusetts Right-To-Know List:** Carbon dioxide; Nitrogen; Oxygen**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):** Not regulated.**Minnesota Hazardous Substances List:** Carbon dioxide; Nitrogen**New Jersey Right-To-Know List:** Carbon dioxide; Nitrogen; Oxygen**Pennsylvania Right-To-Know List:** Carbon dioxide; Nitrogen; Oxygen**Rhode Island Right-To-Know List:** Carbon dioxide; Nitrogen; Oxygen**16 OTHER INFORMATION****HAZARD RATINGS**

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	1	0	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	Flammability	Physical Hazard	Personal Protection
HMIS	1	0	0	B

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Personal Protection codes: B - Safety Glasses, Gloves

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

Issue Date: 19-Nov-2007**Supersedes Date:****SDS No.:** 1007982**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.