Material Safety Data Sheet

1. Product and Company Identification

Product name : **Nitrogen, Compressed Gas**

Chemical formula : N2

Synonyms : Diatomic Nitrogen; Dinitrogen; Nitrogen; Nitrogen-14; Nitrogen Gas; UN 1066

Company : Med-Tech Gases, Inc.
20 Hall Street
Medford, MA 02155

Telephone : 800-FINE-GAS

Emergency : 800-424-9300

2. Composition/Information on Ingredients

Components	CAS Number	% Volume
Nitrogen, Compressed Gas	7727-37-9	100%

3. Hazards Identification

Emergency Overview

May cause difficulty breathing.
Containers may rupture or explode if exposed to heat.

Potential Health Effects

Inhalation	:	Nausea, vomiting, tingling sensation, suffocation, convulsions, coma, headache, drowsiness, dizziness, loss of coordination, unconsciousness, fatigue, impairment of judgment, irregular heartbeat.
Eye contact	:	Irritation.
Skin contact	:	No information on significant adverse effects.
Ingestion	:	Ingestion of a gas is unlikely.
Chronic Health Hazard	:	None known.

4. First Aid Measures

General advice	:	None.
Eye contact	:	Flush eyes with plenty of water.
Skin contact	:	Wash exposed skin with soap and water.
Ingestion	:	If a large amount is swallowed, get immediate medical attention.
Inhalation	:	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

5. Fire-Fighting Measures

Suitable extinguishing media	:	Use extinguishing agents appropriate for surrounding fire.
Specific hazards	:	Negligible fire hazard. Pressurized containers may rupture or explode if exposed to sufficient heat.
Fire fighting	:	Move container from fire area if it can be done without risk. Cool containers with water spray until well after fire is out. Stay away from ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Use extinguishing agents appropriate for surrounding fire. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Do not get water directly on material. Reduce vapors with water spray. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Consider downwind evacuation if material is leaking.
Protective Equipment and Precautions for Firefighters	:	Wear full protective fire fighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

6. Accidental Release Measures

Occupational spill/release	:	Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.
Additional advice	:	None.

7. Handling and Storage

Handling

Avoid breathing gas. Use only with adequate ventilation.

Storage

Store in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.

8. Exposure Controls / Personal Protection

Engineering measures/ventilation

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal protective equipment

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 a 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.
Hand protection	:	Protective gloves are not required.
Eye protection	:	Eye protection not required, but recommended.
Skin and body protection	:	Protective clothing is not required.

9. Physical and Chemical Properties

Form	:	Gas.
Color	:	Colorless.
Odor	:	Odorless.
Molecular weight	:	28.0134
Vapor pressure	:	760 mmHg @ -196°C
Vapor density	:	0.967 (air = 1)
Specific gravity	:	Not applicable.
Boiling point	:	-321°F (-196°C)
Melting point	:	-346°F (-210°C)
Water solubility	:	1.6% @ 20°C
Evaporation rate	:	Not applicable.
Solvent solubility	:	Soluble: liquid ammonia Slightly soluble: alcohol

10. Stability and Reactivity

Stability	:	Stable at normal temperatures and pressure.
Conditions to avoid	:	Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.
Materials to avoid	:	Metals, oxidizing materials.
Hazardous decomposition products	:	Thermal decomposition products: oxides of nitrogen.

11. Toxicological Information

Component Analysis – LD50/LC50

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

Component Carcinogenicity

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

12. Ecological Information

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

13. Disposal Considerations

Waste from residues / unused products	:	Dispose in accordance with all applicable regulations.
Contaminated packaging	:	Return cylinder to supplier.

14. Transport Information

DOT (US only)

Proper shipping name	:	Nitrogen, Compressed
Class	:	2.2
UN/ID No.	:	UN1066
Labeling	:	Non-Flammable Gas

Further information

Cylinders should be transported in a secure upright position in a well ventilated truck.

15. Regulatory Information

U.S. Federal Regulations

None of this product's components are listed under SARA Section 302/304 (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: Yes
Chronic: No
Fire: No
Reactive: No
Pressure: Yes

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	RI
NITROGEN, COMPRESSED GAS	7727-37-9	No	Yes	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65