

Safety Data Sheet

Section 1. Identification

Field	Details
Product Identification	Nitrous Oxide Cartridges, 16g
Product Description	Nitrous Oxide (N ₂ O) gas, liquefied in a sealed cartridge
Recommended Use	For cryosurgical application devices
Supplier	Delasco, 4001 E Plano Pkwy, Ste 100, Plano, TX 75074
Phone	1-712-323-3269
Fax	1-712-323-1156
Website	www.delasco.com
Email	questions@delasco.com
Emergency Contact	Chemtrec (24 hour) 1-800-424-9300

Section 2. Hazard(s) Identification

Hazard Element	Details
Classification	Pressurized gas (liquefied), Oxidizing gas (Category 1)
Signal Word	Danger
Hazard Statements	H270: May cause or intensify fire; oxidizer H280: Contains gas under pressure; may explode if heated
Precautionary Statements	P244, P220, P410+P403, P370+P376
Label Symbols	None

Section 3. Composition/Information on Ingredients (with Table)

Chemical Name	CAS Number	Concentration	Other Names/Synonyms	Hazardous Components
Nitrous Oxide	10024-97-2	>99%	N ₂ O	None

Section 4. First-aid Measures (with Table)

Route of Exposure	First Aid Measures
Inhalation	Remove to fresh air. Administer artificial respiration or oxygen if needed. Seek medical attention.
Skin Contact	Flush affected area with warm water. Remove contaminated clothing. Seek medical attention.

Eye Contact	Flush eyes with warm water for at least 15 minutes. Seek immediate medical attention.
Ingestion	Unlikely route. May cause frostbite to lips/mouth. Do not induce vomiting. Get medical attention.

Section 5. Fire Fighting Measures (with Table)

Parameter	Details
Extinguishing Media	Use media suitable for surrounding fire. N ₂ O itself is not flammable.
Hazards	Oxidizer. May intensify fire. Gas under pressure may explode if heated.
Protective Equipment	SCBA and full protective gear recommended.
NFPA Ratings	Health – 2, Flammability – 0, Instability – 1, Special – OX

Section 6. Accidental Release Measures (with Table)

Action Area	Recommended Procedures
Personal Precautions	Evacuate area. Use SCBA if needed. Avoid flammables.
Environmental Precautions	Prevent buildup in confined spaces.
Cleanup Methods	Ventilate area. Use water spray to reduce vapors. Stop leak if safe.

Section 7. Handling and Storage

Aspect	Details
Handling	Do not handle with oily/greasy gloves/tools. Use clean oxygen-rated equipment.
Storage	Store upright in a well-ventilated place away from flammables. Max temp: 50°C (122°F).
Incompatibilities	Oils, grease, hydrocarbons, alkali metals, powdered aluminum, acids, aldehydes.

Section 8. Exposure Controls and Personal Protection (with Table)

Agency	Limit Type	Exposure Limit
ACGIH	TLV (TWA)	50 ppm
OSHA	PEL	Not established

NIOSH	REL (TWA)	50 ppm
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Section 9. Physical and Chemical Properties (with Table)

Property	Value
Appearance	Colorless gas
Odor	Slightly sweet
Boiling Point	-88.5°C (-127.4°F)
Melting Point	-90.8°C (-131.5°F)
Vapor Pressure (at 21.1°C)	735 psig (5070 kPa)
Density	1.947 kg/m ³
Solubility in Water	0.68 vol/vol at 20°C
Molecular Weight	44.01 g/mol

Section 10. Stability and Reactivity

Parameter	Details
Chemical Stability	Stable under recommended storage and handling conditions.
Hazardous Reactions	May decompose explosively at high temperatures.
Incompatible Materials	Oils, grease, hydrocarbons, alkali metals, acids, aldehydes.
Decomposition Products	Nitrogen and oxygen gases.
Conditions to Avoid	Heat, sparks, flames, and contamination with incompatible materials.

Section 11. Toxicological Information

Exposure Type	Health Effects
Inhalation	May cause asphyxiation at high concentrations. Prolonged exposure may lead to B12 deficiency.
Skin Contact	Contact with liquid can cause frostbite.
Eye Contact	Exposure to liquid may cause severe irritation or frostbite.
Chronic Effects	Prolonged exposure may cause megaloblastic anemia, reproductive toxicity.
Carcinogenicity	Not classified as a carcinogen by NTP, IARC, ACGIH, or OSHA.

Section 12. Ecological Information

Ecological Parameter	Details
Ecotoxicity	Not expected to be hazardous to the environment.
Ozone Depletion	Does not contain Class I or II ozone-depleting substances.
Marine Pollutant	Not listed as a marine pollutant.
Other Adverse Effects	None known.

Section 13. Disposal Considerations

Disposal Parameter	Details
Recommended Disposal Method	Return unused cartridges to supplier.
Waste Handling	Do not release into environment. Handle in accordance with applicable laws.
Regulatory Compliance	Dispose of in accordance with federal, state, and local regulations.

Section 14. Transport Information

Parameter	Details
US DOT UN Number	UN2037
Proper Shipping Name	Receptacles, small, containing gas (Gas cartridges) without release device
Hazard Class	2.2 (Non-flammable, non-toxic gas)
Packing Group	N/A
Special Provisions	Not restricted under SP 191, IATA A98

Section 15. Regulatory Information

Regulation	Applicability
Seveso Directive (96/82/EC)	Not applicable
REACH Registration	Exempt (Annex IV/V)
Local/National Regulations	All applicable regulations must be followed

Section 16. Other Information

Parameter	Details
Date of Issue	08/06/2025