



Safety Data Sheet

MEDICAL NITROGEN LS-160 - 99% PURITY

Central McGowan
123 Roosevelt Road, St. Cloud, MN, 56301
800-569-1322

Section 1: Product and Company Identification

Central McGowan
123 Roosevelt Road, St. Cloud, MN, 56301

Product Code: **MEDICAL NITROGEN LS-160 - 99% PURITY**

Synonyms: MMG LS-160 NF

Recommended Use:

Usage Restrictions:

Section 2: Hazards Identification



Warning

Hazard Classification:

Hazard Statements:

Precautionary Statements

Storage:

Gases Under Pressure

Contains gas under pressure; may explode if heated

Protect from sunlight.

Store in well-ventilated place.

Section 3: Composition/Information on Ingredients

CAS #

7727-37-9

| Chemical Substance | Chemical Family | Trade Names |
|--------------------------|-----------------|---|
| NITROGEN, COMPRESSED GAS | Inorganic gases | DIATOMIC NITROGEN; DINITROGEN; NITROGEN; NITROGEN-14; NITROGEN GAS; UN 1066; N2 |

Section 4: First Aid Measures

| Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|--|----------------------------------|--|--|----------------------------------|
| Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | 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. | For inhalation, consider oxygen. |

Section 5: Fire Fighting Measures

| Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|--|------------------------|--|
| Non-flammable. Use suitable extinguishing media for surrounding fire. Cylinders may rupture or explode if exposed to heat. | Non-flammable | <ul style="list-style-type: none"> Respiratory protection may be needed for frequent or heavy exposure. |

Section 6: Accidental Release Measures

| Personal Precautions | Environmental Precautions | Methods for Containment |
|--|---|--|
| Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | No significant effects from contamination expected. | Stop leak if possible without personal risk. |

| Methods for Cleanup | Other Information |
|---------------------|-------------------|
| N/A | N/A |

Section 7: Handling and Storage

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

Section 8: Exposure Controls/Personal Protection

| Exposure Guidelines |
|---|
| NITROGEN, COMPRESSED GAS: NITROGEN: ACGIH (simple asphyxiant) |

Engineering Controls

Handle only in fully enclosed systems.

| Eye Protection | Skin Protection | Respiratory Protection |
|---|--|--|
| Eye protection not required, but recommended. | Protective clothing is not required. Protective gloves are not required. | Respiratory protection may be needed for frequent or heavy exposure. |

General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

| Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor |
|----------------|------------|-----------|----------------------|---------------|----------|
| Gas | Clear | Colorless | N/A | Gas | Odorless |

| Taste | Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits |
|-----------|---------------|---------------|-----------------------|--------------------------|------------------------|
| Tasteless | Not flammable | Not available | Not available | Nonflammable | Nonflammable |

| Lower Explosive Limits | Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity |
|------------------------|-----------------|-----------------|-------------------|---------------|------------------|
| Nonflammable | -321 F (-196 C) | -346 F (-210 C) | 760 mmHg @ -196 C | 0.967 (Air=1) | Not applicable |

| Water Solubility | pH | Odor Threshold | Evaporation Rate | Viscosity | Molecular Weight |
|------------------|----------------|----------------|------------------|-------------------|------------------|
| 1.6% @ 20 C | Not applicable | Not available | Not applicable | 0.01787 cP @ 27 C | 28.0134 |

| Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|-------------------|------------|-------------------|----------------------|------------|--------------------------|
| N2 | 1.2506 g/L | Not available | 100% | 1 | Soluble : Liquid ammonia |

Section 10: Stability and Reactivity

| Stability | Conditions to Avoid | Incompatible Materials |
|---|--|-----------------------------|
| Stable at normal temperatures and pressure. | Protect from physical damage and heat. Containers may rupture or explode if exposed to heat. | Metals, oxidizing materials |

| Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|----------------------------------|------------------------------------|
| Oxides of nitrogen | Will not polymerize. |

Section 11: Toxicology Information

Acute Effects

| Oral LD50 | Dermal LD50 | Inhalation |
|---------------|---------------|--|
| Not available | Not available | Nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, tingling sensation, loss of coordination, convulsions, coma |

| Eye Irritation | Skin Irritation | Sensitization |
|---|---|----------------------|
| Contact with rapidly expanding gas may cause burns or frostbite | No information on significant adverse effects | Difficulty breathing |

Chronic Effects

| Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|-----------------|---------------|----------------------|-----------------------|
| Not hazardous | Not available | Not available | No data |

Section 12: Ecological Information

Fate and Transport

| Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|--|-----------------------------|--------------------------------|-------------------------|
| Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available | Not available | Not available | Not available |

| | | | |
|-------------------------------|--|--|--|
| Other toxicity: Not available | | | |
|-------------------------------|--|--|--|

Section 13: Disposal Considerations

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|--|
| Dispose in accordance with all applicable regulations. |
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Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|----------------------|-----------|--------------------------|----------------|-----------------------|--|--|---------------------------------|
| Nitrogen, compressed | UN1066 | 2.2 | Not applicable | 2.2 | 75 kg or L | 150 kg | N/A |

Canadian Transportation of Dangerous Goods

| Shipping Name | UN Number | Class | Packing Group / Risk Group |
|----------------------|-----------|-------|----------------------------|
| Nitrogen, compressed | UN1066 | 2.2 | Not applicable |

Section 15: Regulatory Information

U.S. Regulations

| CERCLA Sections | SARA 355.30 | SARA 355.40 |
|-----------------|----------------|----------------|
| Not regulated. | Not regulated. | Not regulated. |

SARA 370.21

| Acute | Chronic | Fire | Reactive | Sudden Release |
|-------|---------|------|----------|----------------|
| Yes | No | No | No | Yes |

SARA 372.65

| |
|----------------|
| Not regulated. |
|----------------|

OSHA Process Safety

| |
|----------------|
| Not regulated. |
|----------------|

State Regulations

| CA Proposition 65 |
|-------------------|
| Not regulated. |

Canadian Regulations

| WHMIS Classification |
|----------------------|
| A |

National Inventory Status

| US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|----------------------|------------------------------|-----------------------------|
| Listed on inventory. | Not listed. | Listed on inventory. |

Section 16: Other Information

NFPA Rating

HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard