

### Section 1: Product and Company Identification

**Absolute Accuracy**  
4591 S Wayside Dr  
Houston, TX 77087  
(832) 571-2387

Product Code: 564

**Synonyms:** N/A  
**Recommended Use:** CALIBRATION GAS  
**Usage Restrictions:** I

### Section 2: Hazards Identification



**Danger**

**Hazard Classification:**

Gases Under Pressure  
Reproductive Toxicity (Category 1.A)  
Specific target organ toxicity (Repeated Exposure) (Category 1)

**Hazard Statements:**

Causes damage to organs through prolonged or repeated exposure  
Contains gas under pressure; may explode if heated  
May damage fertility or the unborn child

**Precautionary Statements**

**Prevention:**

Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/fume/gas/mist/ vapors/spray..  
Wear protective gloves, protective clothing, eye protection and face protection.  
Obtain special instructions before use.

**Response:**

Call a poison center or doctor if you feel unwell.  
If exposed or concerned: Get medical advice/attention.

**Storage:**

Protect from sunlight.  
Store in well-ventilated place.  
Store locked up.

**Disposal:**

Dispose of contents and/or container in accordance with applicable regulations.

## Section 3: Composition/Information on Ingredients

	CAS #	Concentration
<b>Nitrogen Dioxide</b>	10102-44-0	PPM100
<b>Nitric Oxide</b>	10102-43-9	PPM500
<b>Carbon Monoxide</b>	630-08-0	PPM 1000
<b>Nitrogen</b>	7727-37-9	BALANCE

	Chemical Substance	Chemical Family	Trade Names
<b>Nitrogen Dioxide</b>	NITROGEN DIOXIDE	Inorganic gases	Dinitrogen tetroxide Dinitrogen tetroxide, liquefied Nitrogen dioxide, liquefied Nitrogen oxide Nitrogen peroxide Nitrogen peroxide, liquefied Nitrogen tetroxide
<b>Nitric Oxide</b>	NITRIC OXIDE	Inorganic gases	NITROGEN OXIDE (NO); NITRIC OXIDE (NO); NITRIC OXIDE TRIMER; NITROGEN MONOXIDE; NITROGEN MONOOXIDE; NITROGEN OXIDE (N4O4); NITROSYL RADICAL; RCRA P076; STCC 4920330; UN 1660; NO
<b>Carbon Monoxide</b>	CARBON MONOXIDE	Inorganic gases	CARBON OXIDE; CARBON OXIDE (CO); UN 1016; CO
<b>Nitrogen</b>	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
<b>Nitrogen Dioxide</b>	Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.	Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.	Not applicable route of exposure	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.	None
<b>Nitric Oxide</b>	Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.	Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.	If a large amount is swallowed, get medical attention.	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.	None

	<b>Skin Contact</b>	<b>Eye Contact</b>	<b>Ingestion</b>	<b>Inhalation</b>	<b>Note to Physicians</b>
<b>Carbon Monoxide</b>	Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.	Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.	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.
<b>Nitrogen</b>	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

	<b>Suitable Extinguishing Media</b>	<b>Products of Combustion</b>	<b>Protection of Firefighters</b>
<b>Nitrogen Dioxide</b>	Non-flammable gas. Use suitable extinguishing media for surrounding fire.	Thermal decomposition to give nitric oxide and oxygen when heated above 160 deg C	<ul style="list-style-type: none"> <li>▪ Any self-contained breathing apparatus with a full facepiece. Use a chemical protective suit.</li> <li>▪ Any self-contained breathing apparatus with a full facepiece. Use a chemical protective suit.</li> </ul>
<b>Nitric Oxide</b>	Water Do not use dry chemicals, carbon dioxide or halogenated extinguishing agents. Large fires: Flood with fine water spray.	Nitrogen oxides	<ul style="list-style-type: none"> <li>▪ Any self-contained breathing apparatus with a full facepiece.</li> <li>▪ Any self-contained breathing apparatus with a full facepiece.</li> </ul>
<b>Carbon Monoxide</b>	Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray.	Carbon dioxide	<ul style="list-style-type: none"> <li>▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.</li> <li>▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.</li> </ul>
<b>Nitrogen</b>	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"> <li>▪ Respiratory protection may be needed for frequent or heavy exposure.</li> </ul>

## Section 6: Accidental Release Measures

	<b>Personal Precautions</b>	<b>Environmental Precautions</b>	<b>Methods for Containment</b>
<b>Nitrogen Dioxide</b>	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers.	Not available.
<b>Nitric Oxide</b>	Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Avoid contact with combustible materials.	Avoid contamination of water, soil, drains, and sewers.	Stop leak if possible without personal risk.

	<b>Personal Precautions</b>	<b>Environmental Precautions</b>	<b>Methods for Containment</b>
<b>Carbon Monoxide</b>	Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.	Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers.	Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition.
<b>Nitrogen</b>	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.

	<b>Methods for Cleanup</b>	<b>Other Information</b>
<b>Nitrogen Dioxide</b>	Contact emergency personnel	None.
<b>Nitric Oxide</b>	Contact emergency personnel.	Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).
<b>Carbon Monoxide</b>	Stop leak, evacuate area. Wear protective equipment.	Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
<b>Nitrogen</b>	N/A	N/A

## Section 7: Handling and Storage

	<b>Handling</b>	<b>Storage</b>
<b>Nitrogen Dioxide</b>	Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125F (52C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.	Do not get liquid in eyes, on skin, or clothing. Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Open valve slowly. Close cylinder valve after each use; keep closed even when empty. If valve is hard to open, discontinue use and contact your supplier.
<b>Nitric Oxide</b>	Store and handle in accordance with all current regulations and standards. NFPA 430 Code for the Storage of Liquid and Solid Oxidizing Materials. Notify State Emergency Response Commission for storage or use at amounts greater than or equal to the TPQ (U.S. EPA SARA Section 302). SARA Section 303 requires facilities storing a material with a TPQ to participate in local emergency response planning (U.S. EPA 40 CFR 355.30).	Keep separated from incompatible substances.
<b>Carbon Monoxide</b>	Keep separated from incompatible substances.	Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.
<b>Nitrogen</b>	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

	<b>Exposure Guidelines</b>
<b>Nitrogen Dioxide</b>	TLV-TWA: 3 ppm Short-term Exposure Limits (TLV-STEL): 5ppm

	<b>Exposure Guidelines</b>
<b>Nitric Oxide</b>	NITRIC OXIDE: 25 ppm (30 mg/m <sup>3</sup> ) OSHA TWA 25 ppm ACGIH TWA 25 ppm (30 mg/m <sup>3</sup> ) NIOSH recommended TWA 10 hour(s)
<b>Carbon Monoxide</b>	CARBON MONOXIDE: 50 ppm (55 mg/m <sup>3</sup> ) OSHA TWA 35 ppm (40 mg/m <sup>3</sup> ) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 200 ppm (229 mg/m <sup>3</sup> ) OSHA ceiling (vacated by 58 FR 35338, June 30, 1993) 25 ppm ACGIH TWA 35 ppm (40 mg/m <sup>3</sup> ) NIOSH recommended TWA 10 hour(s) 200 ppm (229 mg/m <sup>3</sup> ) NIOSH recommended ceiling
<b>Nitrogen</b>	NITROGEN, COMPRESSED GAS: NITROGEN: ACGIH (simple asphyxiant)

### Engineering Controls

Handle only in fully enclosed systems.

	<b>Eye Protection</b>	<b>Skin Protection</b>	<b>Respiratory Protection</b>
<b>Nitrogen Dioxide</b>	Eye protection not required, but recommended.	Wear appropriate chemical resistant clothing.	Any self-contained breathing apparatus with a full facepiece. Use a chemical protective suit.
<b>Nitric Oxide</b>	Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.	Wear appropriate chemical resistant clothing.	Any self-contained breathing apparatus with a full facepiece.
<b>Carbon Monoxide</b>	Eye protection not required, but recommended.	Protective clothing is not required.	Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.
<b>Nitrogen</b>	Eye protection not required, but recommended.	Protective clothing is 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

	<b>Physical State</b>	<b>Appearance</b>	<b>Color</b>	<b>Change in Appearance</b>	<b>Physical Form</b>	<b>Odor</b>	<b>Taste</b>
<b>Nitrogen Dioxide</b>	Gas	Clear	Yellow to dark brown	N/A	Gas	Pungent odor	N/A
<b>Nitric Oxide</b>	Gas	Clear	Colorless	N/A	Gas	Not available	N/A
<b>Carbon Monoxide</b>	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless
<b>Nitrogen</b>	Gas	Clear	Colorless	N/A	Gas	Odorless	Tasteless

	<b>Flash Point</b>	<b>Flammability</b>	<b>Partition Coefficient</b>	<b>Autoignition Temperature</b>	<b>Upper Explosive Limits</b>	<b>Lower Explosive Limits</b>
<b>Nitrogen Dioxide</b>	Not applicable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable
<b>Nitric Oxide</b>	Not applicable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable

	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
<b>Carbon Monoxide</b>	Flammable	Not available	1479.11 (log = 3.17) (estimated from water solubility)	1128-1202 F (609-650 C)	0.74	12.0-12.5%
<b>Nitrogen</b>	Not flammable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
<b>Nitrogen Dioxide</b>	70.1F	12 F (-11 C)	760 mmHg @ 21.1 C	1.58 (air=1)	1.449	Reacts to form nitric acid and nitrous acid; nitrous acid then decomposes to nitric acid and nitric oxide.	Not applicable; solutions are very acidic	Reported values vary. 0.11-0.14 ppm (minimum perceptible value)	Not applicable	0.42 cP @ 20 C
<b>Nitric Oxide</b>	-242 F (-152 C)	-263 F (-164 C)	26000 mmHg @ 20 C	1.036 (Air=1)	Not applicable	7.3% @ 0 C	Not applicable	0.3-1.0 ppm	Not applicable	0.0188 cP @ 25 C
<b>Carbon Monoxide</b>	-312.7 F (-191.5 C)	-326 F (-199 C)	760 mmHg @ -191 C gas; cannot be liquefied at room temperature	0.968 (Air=1)	Not applicable	2.3% @ 20 C	Not applicable	Not available	Not applicable	0.01657 cP @ 0 C
<b>Nitrogen</b>	-321 F (-196 C)	-346 F (-210 C)	760 mmHg @ -196 C	0.967 (Air=1)	Not applicable	1.6% @ 20 C	Not applicable	Not available	Not applicable	0.01787 cP @ 27 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
<b>Nitrogen Dioxide</b>	46.01 (NO <sub>2</sub> ) or 92.01 (N <sub>2</sub> O <sub>4</sub> )	N-O <sub>2</sub> or N <sub>2</sub> -O <sub>4</sub>	Not available	Not available	100%	Not available	Soluble: Alkalies, chloroform, carbon disulfide and concentrated nitric and sulfuric acids.
<b>Nitric Oxide</b>	30.01	N-O	1.3402 g/L	Not available	Not available	Not applicable	Soluble: Sulfuric acid, alcohol, ferrous sulfate solutions, carbon disulfide
<b>Carbon Monoxide</b>	28.01	C-O	1.250 g/L @ 0 C	Not available	100%	Not applicable	Soluble: Alcohol, benzene, acetic acid, ethyl acetate, chloroform, cuprous chloride solutions
<b>Nitrogen</b>	28.0134	N <sub>2</sub>	1.2506 g/L	Not available	100%	1	Soluble: Liquid ammonia

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
<b>Nitrogen Dioxide</b>	Normally stable. Nitrogen dioxide thermally decomposes to nitric oxide and oxygen when heated above 160 deg C.	Normally stable. Nitrogen dioxide thermally decomposes to nitric oxide and oxygen when heated above 160 deg C.	ACETIC ANHYDRIDE, ALCOHOLS, AMMONIA, BORON TRICHLORIDE, CALCIUM, DIMETHYL SULFOXIDE, FORMALDEHYDE, hydrogen, oxygen, metals

	<b>Stability</b>	<b>Conditions to Avoid</b>	<b>Incompatible Materials</b>
<b>Nitric Oxide</b>	May react on contact with air. May react on contact with water. Releases toxic, corrosive, flammable or explosive gases. May explode during distillation or evaporation.	May react on contact with air. May react on contact with water. Releases toxic, corrosive, flammable or explosive gases. May explode during distillation or evaporation.	Metals, bases, metal oxides, reducing agents, combustible materials, halo carbons, oxidizing materials, halogens, metal carbide, metal salts
<b>Carbon Monoxide</b>	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Oxidizing materials, halogens, metal oxides, metals, combustible materials, lithium
<b>Nitrogen</b>	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Metals, oxidizing materials

	<b>Hazardous Decomposition Products</b>	<b>Possibility of Hazardous Reactions</b>
<b>Nitrogen Dioxide</b>	Decomposes in water to form nitric acid and nitrous acid.	Will not polymerize.
<b>Nitric Oxide</b>	Oxides of nitrogen	Will not polymerize.
<b>Carbon Monoxide</b>	Oxides of carbon	Will not polymerize.
<b>Nitrogen</b>	Oxides of nitrogen	Will not polymerize.

## Section 11: Toxicology Information

### Acute Effects

	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation</b>
<b>Nitrogen Dioxide</b>	LC50 Inhalation Vapor Rat 790 mg/m3 5 minutes	Not available	Respiratory tract irritation, cough, dyspnea, headache, nausea, irregular heartbeat, fatigue, pulmonary edema, rapid breathing, increased heart rate, dyspnea, chest pain, bleeding from the lungs or small airways and cyanosis (bluish discoloration of the skin)
<b>Nitric Oxide</b>	LC50 Inhalation Gas. Rat 1068 mg/m3 4 hours	Not available	Irritation, nausea, vomiting, stomach pain, chest pain, difficulty breathing, headache, dizziness, bluish skin color, lung congestion
<b>Carbon Monoxide</b>	LC50 Inhalation Gas. Rat 1807 ppm 4 hours	Not available	Changes in body temperature, changes in blood pressure, nausea, vomiting, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, disorientation, hallucinations, pain in extremities, tremors, loss of coordination, hearing loss, visual disturbances, eye damage, suffocation, blood disorders, convulsions, coma
<b>Nitrogen</b>	Not available	Not available	Nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, tingling sensation, loss of coordination, convulsions, coma

	<b>Eye Irritation</b>	<b>Skin Irritation</b>	<b>Sensitization</b>
<b>Nitrogen Dioxide</b>	Irritation	Liquid: burns	Respiratory tract irritation, difficulty breathing, skin irritation, eye irritation
<b>Nitric Oxide</b>	Irritation (possibly severe)	Irritation (possibly severe)	Acute toxicity, Category 1, inhalation; H330: Fatal if inhaled. Skin corrosion, Category 1B; H314: Causes severe skin burns and eye damage.
<b>Carbon Monoxide</b>	No information on significant adverse effects	No information on significant adverse effects	Acute toxicity, Category 3, inhalation; H331: Toxic if inhaled. Reproductive toxicity, Category 1A; H360D: May damage the unborn child. Specific Target Organ Toxicity (repeated exposure), Category 1; H372: Causes damage to organs through prolonged or repeated exposure.
<b>Nitrogen</b>	Contact with rapidly expanding gas may cause burns or frostbite	No information on significant adverse effects	Difficulty breathing

### Chronic Effects

	<b>Carcinogenicity</b>	<b>Mutagenicity</b>	<b>Reproductive Effects</b>	<b>Developmental Effects</b>
<b>Nitrogen Dioxide</b>	May be a carcinogen	Mutagenic	May have reproductive effects.	No data

	<b>Carcinogenicity</b>	<b>Mutagenicity</b>	<b>Reproductive Effects</b>	<b>Developmental Effects</b>
<b>Nitric Oxide</b>	Not available	Available.	Not available	No data
<b>Carbon Monoxide</b>	Not available	Available.	Available.	No data
<b>Nitrogen</b>	Not hazardous	Not available	Not available	No data

## Section 12: Ecological Information

### Fate and Transport

	<b>Eco toxicity</b>	<b>Persistence / Degradability</b>	<b>Bioaccumulation / Accumulation</b>	<b>Mobility in Environment</b>
<b>Nitrogen Dioxide</b>	Fish toxicity: Acute LC50 19600 ug/L Fresh water Fish - Tench - Tinca tinca - LARVAE - 20 days - 11.18 mm - 11.36 mg 96 hours Invertebrate toxicity: Acute LC50 79450 ug/L Marine water Crustaceans - Redtail prawn - Penaeus penicillatus - 3.58 to 4.75 cm - 0.4 to 0.69 g 48 hours Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Not available	Not available
<b>Nitric Oxide</b>	Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Readily biodegrades	Not available	Not expected to leach through the soil or the sediment.
<b>Carbon Monoxide</b>	Fish toxicity: 75000 ug/L 1 day(s) LC100 (Mortality) Orangespotted sunfish (Lepomis humilis) Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Relatively non-persistent in the environment. Highly volatile from water.	Not available	Not expected to leach through the soil or the sediment.
<b>Nitrogen</b>	Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available	Not available	Not available	Not available



available Other toxicity: Not available			
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## Section 13: Disposal Considerations

<b>Nitrogen Dioxide</b>	Dispose in accordance with all applicable federal and local regulations.
<b>Nitric Oxide</b>	Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. D003. Dispose in accordance with all applicable regulations.
<b>Carbon Monoxide</b>	Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.
<b>Nitrogen</b>	Dispose in accordance with all applicable regulations.

## Section 14: Transportation Information

### U.S. DOT 49 CFR 172.101

#### DOT Information For This Mixture

<b>Shipping Name</b>	Compressed gas, n.o.s. (Nitrogen, Carbon Monoxide)
<b>UN Number</b>	UN1956
<b>Hazard Class</b>	2.2
<b>Hazard Information</b>	Non-Flammable Gas

#### Individual Component Information

	<b>Proper Shipping Name</b>	<b>ID Number</b>	<b>Hazard Class or Division</b>	<b>Packing Group</b>	<b>Labeling Requirements</b>	<b>Passenger Aircraft or Railcar Quantity Limitations</b>	<b>Cargo Aircraft Only Quantity Limitations</b>	<b>Additional Shipping Description</b>
<b>Nitrogen Dioxide</b>	DINITROGEN TETROXIDE; or NITROGEN DIOXIDE	UN1067	2.3, 5.1	Not applicable	DINITROGEN TETROXIDE	Forbidden	Forbidden	N/A
<b>Nitric Oxide</b>	Nitric oxide, compressed	UN1660	2.3	Not applicable	2.3; 5.1;8	Forbidden	Forbidden	Toxic-Inhalation Hazard Zone A

	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
<b>C</b> <b>a</b> <b>r</b> <b>b</b> <b>o</b> <b>n</b> <b>M</b> <b>o</b> <b>n</b> <b>o</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	Carbon monoxide, compressed	UN1016	2.3	Not applicable	2.3; 2.1	Forbidden	25 kg	Toxic-Inhalation Hazard Zone D
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>o</b> <b>g</b> <b>e</b> <b>n</b>	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
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>o</b> <b>g</b> <b>e</b> <b>n</b> <b>D</b> <b>i</b> <b>o</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	DINITROGEN TETROXIDE; or NITROGEN DIOXIDE	UN1067	2.3	Not applicable
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>i</b> <b>c</b> <b>O</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	Nitric oxide, compressed	UN1660	2.3; 5.1; 8	Not applicable
<b>C</b> <b>a</b> <b>r</b> <b>b</b> <b>o</b> <b>n</b> <b>M</b> <b>o</b> <b>n</b> <b>o</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	Carbon monoxide, compressed	UN1016	2.3; 2.1	Not applicable
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>o</b> <b>g</b> <b>e</b> <b>n</b>	Nitrogen, compressed	UN1066	2.2	Not applicable

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>o</b> <b>g</b> <b>e</b> <b>n</b> <b>D</b> <b>i</b> <b>o</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	Not regulated.	100 LBS TPQ	10 LBS RQ
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>i</b> <b>c</b> <b>O</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	10 LBS RQ	100 LBS TPQ	10 LBS RQ
<b>C</b> <b>a</b> <b>r</b> <b>b</b> <b>o</b> <b>n</b> <b>M</b> <b>o</b> <b>n</b> <b>o</b> <b>x</b> <b>i</b> <b>d</b> <b>e</b>	Not regulated.	Not regulated.	Not regulated.
<b>N</b> <b>i</b> <b>t</b> <b>r</b> <b>o</b> <b>g</b> <b>e</b> <b>n</b>	Not regulated.	Not regulated.	Not regulated.

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
<b>N</b> <b>i</b> <b>t</b> <b>r</b>	Yes	No	Yes	No	Yes

<b>ogen Dioxide</b>					
<b>Nitric Oxide</b>	Yes	No	No	No	Yes
<b>Carbon Monoxide</b>	Yes	No	Yes	No	Yes
<b>Nitrogen</b>	Yes	No	No	No	Yes

#### SARA 372.65

<b>Nitrogen Dioxide</b>	N/A
<b>Nitric Oxide</b>	Not regulated.
<b>Carbon Monoxide</b>	Not regulated.
<b>Nitrogen</b>	Not regulated.

#### OSHA Process Safety

<b>Nitrogen Dioxide</b>	Not available
<b>Nitric Oxide</b>	250 LBS TQ
<b>Carbon Monoxide</b>	Not regulated.
<b>Nitrogen</b>	Not regulated.

#### State Regulations

	<b>CA Proposition 65</b>
<b>Nitrogen Dioxide</b>	Not regulated
<b>Nitric Oxide</b>	Not regulated.
<b>Carbon Monoxide</b>	WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .
<b>Nitrogen</b>	Not regulated.

#### Canadian Regulations

	<b>WHMIS Classification</b>
<b>Nitrogen Dioxide</b>	A, C, D1A, D2B, E
<b>Nitric Oxide</b>	ACD1
<b>Carbon Monoxide</b>	A, B1, D1A, D2A.
<b>Nitrogen</b>	A

#### National Inventory Status

	<b>US Inventory (TSCA)</b>	<b>TSCA 12b Export Notification</b>	<b>Canada Inventory (DSL/NDSL)</b>
<b>Nitrogen Dioxide</b>	Listed on inventory.	Listed	Listed on inventory.
<b>Nitric Oxide</b>	Listed on inventory.	Not listed.	Not determined.
<b>Carbon Monoxide</b>	Listed on inventory.	Not listed.	Listed on inventory.
<b>Nitrogen</b>	Listed on inventory.	Not listed.	Listed on inventory.

## Section 16: Other Information

	<b>NFPA Rating</b>
<b>Nitrogen Dioxide</b>	HEALTH=3 FIRE=0 REACTIVITY=0 SPECIAL=W-1 OX
<b>Nitric Oxide</b>	HEALTH=4 FIRE=0 REACTIVITY=1 SPECIAL=OX

<b>Carbon Monoxide</b>	HEALTH=2 FIRE=4 REACTIVITY=0
<b>Nitrogen</b>	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

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