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Chlorine in Nitrogen
0.0002-0.02%

MATERIAL SAFETY DATA SHEET

Identification

Revision Date 01-01-15

Formula:
Document Number: MSDS 126N

Composition and Information on Ingredients

Chemical Name	CAS #	Mole %	Exposure Limits in Air					Other ppm
			ACGIH		OSHA			
			TLV ppm	STEL ppm	PEL ppm	STEL ppm	IDLH ppm	
Chlorine	7782-05-5	0.0002 - 0.02%	0.5	1	1 0.5 (Vacated 1989 PEL)	1 (Vacated 1989 PEL)	30	NIOSH REL: C 0.5 ppm; DFG MAK C 0.5 ppm
Nitrogen	7727-37-9	Balance	There are no specific exposure limits for Nitrogen. Nitrogen is a simple Asphyxiant (SA). Oxygen levels should be maintained above 19.5%.					

NE = Not Established. C = Ceiling Limit SA = Simple Asphyxiate
See Section 16 for Definitions of Terms Used.
Note: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

Hazard Identification

***EMERGENCY OVERVIEW**: This Clear, pungent-smelling, greenish gas mixture is severely irritating. Persons who respond to releases of this product must protect themselves from inhalation of Chlorine, the corrosive component of this gas mixture, especially in areas which are downwind of the release. Another significant health hazard associated with this gas mixture is the potential for exposure to oxygen-deficient atmospheres. Extreme caution must be used when responding to spills.*

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE: The most significant route of over-exposure for this product is by inhalation.

INHALATION: Due to the small size of an individual cylinder of this product, no unusual health effects from over-exposure to the product are anticipated under routine circumstances of use. If this product is released in a small, poorly-ventilated area (i.e. an enclosed or confined space), a Chlorine-enriched or oxygen-deficient environment may occur.

Inhalation of Chlorine, a component of this gas mixture, may lead to irritation of the nose and throat. Additionally, over-exposures to Chlorine can cause the following health effects: coughing, labored breathing, sore throat, and potentially fatal lung disorders (chemical pneumonities and pulmonary edema). Repeated chlorine-overexposures by inhalation can result in emphysema and erosion of teeth. The symptoms associated with specific Chlorine concentrations are follows:

CONCENTRATION OF CHLORINE	OBSERVED EFFECT
0.06 ppm:	Odor threshold
3 ppm	Irritation of the eyes and mucous membranes
15 ppm	Immediate irritation of the throat

50 ppm	A dangerous health hazard, even for short periods of time. Prolonged exposure may result in death
1000 ppm	Potentially fatal after a short exposure.

Note: This gas mixture contains 2-200 ppm Chorine. Data pertinent to higher concentrations of Chlorine are provided to give complete information on effects observed in humans after over-exposure have occurred.

Additionally, if this product is released in a confined space or other poorly-ventilated area, an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The effects associated with various levels of oxygen are as follows:

CONCENTRATION OF OXYGEN	OBSERVED EFFECT
12-16% Oxygen	Breathing and pulse rate increased, muscular coordination slightly disturbed.
10-14% Oxygen	Emotional upset, abnormal fatigue, disturbed respiration
6-10% Oxygen	Nausea, vomiting, collapse, or loss of consciousness
Below 6%	Convulsive movements, possible respiratory collapse, and death.

CONTACT WITH THE EYES AND SKIN: Due to the presence of Chlorine in this gas mixture, skin over-exposures to this product may lead to burns or dermatitis (red, cracked, irritated skin), depending upon concentration and duration of exposure. Contact of the product with the eyes can cause pain, redness, and prolonged exposure could cause blindness.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms**.** Over-exposure to this gas mixture may cause the health effects described as follows:

- **Acute:** Due to the small size of the individual cylinder of this product, no unusual health effects from exposure to the product are anticipated under routine circumstances of use. This gas mixture is severely irritating and may redden and damage eyes, skin mucous membranes, and any other exposed tissue. If this product is inhaled, irritation of the respiratory system may occur, with coughing, breathing difficulty, and the development of lung disorders.

  Another significant health hazard associated with this gas mixture is the potential for exposure to oxygen-deficient atmospheres. Symptoms of oxygen deficiency include respiratory difficulty, ringing in ears, headaches, shortness of breath, wheezing, headache, dizziness, indigestion, nausea, unconsciousness, and death. The skin of a victim of over-exposure may have a blue color.

- **Chronic:** Persistent irritation may result from repeated exposures to this gas mixture. Repeated chlorine-overexposures by inhalation can result in emphysema and erosion of tooth enamel.

- **Target Organs:** Respiratory system, skin, and eyes.

First-Aid Measures

RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF OVER-EXPOSURE TO THIS PRODUCT WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn.

No unusual health effects are anticipated after exposure to this product, due to the small cylinder size. If any adverse symptom develops after over-exposure to this product, remove victim(s) to fresh air as quickly as possible. Only trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation if necessary.

SKIN EXPOSURE: If irritation of the skin develops after exposure to this gas mixture, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention

EYE EXPOSURE: If irritation of the eye develops after exposure to this gas mixture, open victim's eyes while under gentle running water. Use sufficient force to open eyelids, have victim "roll" eyes. Minimum flushing is for 15 minutes. Seek medical assistance immediately, preferably an ophthalmologist.

Victim(s) who experience any adverse effect after over-exposure to this product must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Fire-Fighting Measures

Flash Point, (method): Not applicable.
Autoignition Temperature: Not applicable.
Flammability Limits (in air by volume %):
Lower (LEL): Not applicable
Upper (LEL): Not applicable

- **Fire Extinguishing Materials:** Non – flammable gas mixture. Use extinguishing media appropriate for surrounding fire.
- **Unusual Fire and Explosion Hazards:** Chlorine , a component of this gas mixture, can produce severe irritation and health effects at low concentrations; therefore this gas mixture presents potential hazard to firefighters. This gas mixture is non-flammable; however, containers, when involved in fire, may rupture or burst in the heat of the fire.
  Explosion Sensitivity to Mechanical Impact: Not sensitive.
  Explosion Sensitivity to Static Discharge: Not sensitive.
- **Special Fire – Fighting Procedures:** Structural firefighters must wear Self–Contained Breathing Apparatus and full protective equipment.

Accidental Release Measures

LEAK RESPONSE: Due to the small size and content of the cylinder, an accidental release of this product presents significantly less risk of over–exposure to Chlorine, the toxic component of this product, and other safety hazards related to the remaining components of this product, than a similar release form a larger cylinder. However, as with any chemical release, extreme caution must be used during emergency response procedures. In the event of a release in which the atmosphere is unknown, and in which other chemicals are potentially involved, evacuate immediately area. Such release should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a leak, clear the affected area, protect people, and respond with trained personnel.

Allow the gas mixture to dissipate. If necessary, monitor the surrounding area (and the original area of the release) for levels of Chlorine and Oxygen. The level of Chlorine must be at acceptable levels (see Section 2, Composition on Information on ingredients) and the atmosphere must have at least 19.5% Oxygen before personnel can be allowed in the area without Self-contained Breathing Apparatus.

If leaking incidentally from the cylinder, contact your supplier.

Handling and Use

- **Work Practices and Hygiene Practices:** All work practices should minimize the release of Chlorine. Eye wash stations/safety showers should be near areas where this product is used or stored. All work operations should be monitored in such a way that emergency personnel can be immediately contacted in the event of a release. Do not attempt to repair, adjust, or in any other way modify the cylinders containing this gas mixture. If there is a malfunction or another type of operational problem, contact nearest distributor immediately.

- **Storage and Handling Practices:** Cylinders should be firmly secured to prevent falling or being knocked-over. Cylinders must be protected from the environment, and preferable kept at room temperature (approximately 21°C; 70°F). Cylinders should be stored in dry, well-ventilated areas away from sources of heat, ignition and direct sunlight. Protect cylinders against physical damage. Full and empty cylinders should be separated. Use a first-in, first-out inventory system to prevent full containers from being stored for long period of time. These cylinders are not refillable. **WARNING! Do not refill DOT 39 cylinders. To do so may cause personal injury or property damage.**

- **Special Precautions for handling Gas Cylinders: WARNING!** Compressed gases can present significant safety hazards. During cylinder use, use equipment designed for these specific cylinders. Ensure all lines and equipment are rated for proper service pressure.

- **Protective Practices during Maintenance of Contaminated Equipment:** Follow practice indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged out safely. Always use product in areas where adequate ventilation is provided.

Exposure Controls – Personal Protection

Ventilation and Engineering Controls: No special ventilation systems or engineering controls are needed under normal circumstances of use. As with all chemicals, use this product in well – ventilated areas. If this product is used in a poorly-ventilated area, install automatic monitoring equipment to detect the levels of oxygen.

Respiratory Protection: No special respiratory protection is required under normal circumstances of use. Maintain Chlorine level below 1 ppm. Use supplied air respiratory protection if Chlorine level exceeds the exposure limits presented in Section 2 (Composition and Information on Ingredients) or if Chlorine levels are unknown or during emergency response to a release of this product. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) or equivalent State standards. The following NIOSH respirator recommendations are in place for Chlorine, a component of this gas mixture.
FOR CHLORINE CONCENTRATIONS UP TO 5 PPM: use a chemical cartridge respirator or a Supplied Air Respirator (SAR)
FOR CHLORINE CONCENTRATIONS UP TO 10 PPM: use a SAR in the continuous flow mode, or a Powered Air Purifying Respirator (PAPR) with Chlorine cartridges, or a gas mask with a Chlorine canister, or a SCBA.
FOR EMERGENCIES OR ENTRY INTO AN AREA OF UNKNOWN CHLORINE CONCENTRATION: use an SCBA or positive pressure, full-faced SAR with an auxiliary SCBA.
FOR ESCAPE FROM A CHLORINE RELEASE: use a gas mask or mouth-piece respirator with Chlorine cartridges or SCBA should be used.

Eye/Face Protection: Safety glasses.

Hand Protection: No special protection is needed under normal circumstances of use.

Body Protection: No special protection is needed under normal circumstances of use.

Physical and Chemical Properties

Unless otherwise specified, the following information is for Nitrogen, the main component of this gas mixture.

GAS DENSITY @32ºF (OºC) and 1 atm: 0.072lbs/ft³ (1.153kg/m³)
BIOLING POINT: -320.4ºF (-195.8ºC)
FREEZING/MELTING POINT @ 10psig –345.8ºF (-210ºC)
SPECIFIC GRAVITY (air = 1) @ 70ºF (21.1ºC): 0.906
PH: Not applicable
SOLUBILITY IN WATER vol./vol. @ 32ºF (0ºC) and 1 atm: 0.023
MOLECULAR WEIGHT: 28.01
EVAPORATING RATE (nBuAc = 1): Not applicable.
EXPANSION RATIO: Not applicable
ODOR THRESHOLD: 0.14 ppm (Chlorine)
SPECIFIC VOLUME (ft³/lb): 13.8
VAPOR PRESSURE @ 70ºF (21.1ºC) psig: Not applicable.
COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable.
APPEARANCE AND COLOR: This product is colorless gas mixture, which is odorless.
HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES): Fittings and joints can be painted with soap solution to detect leak.

Stability and Reactivity

- **Stability:** Normally stable in gaseous state.
- **Decomposition Products:** The components of this gas mixture do not decompose, per se, but can react with other components in the heat of a fire.
- **Materials with which Substance is Incompatible:** Titanium will burn in Nitrogen (the main component of this product). Lithium reacts slowly with Nitrogen at ambient temperatures. Chlorine is not compatible with most metals (except titanium). Through Chlorine is an oxidizer, the concentration of this component in the product is too low for this to be a significant hazard associated with this gas mixture.
- **Hazardous Polymerization:** Will no occur.
- **Conditions to Avoid:** Contact with incompatible materials. Cylinders exposed to high temperatures or direct flame can rupture or burst.

Toxicological Information

TOXICITY DATA: The following toxicology data are available for the components of this product:

NITROGEN: There are no specific toxicology data for Nitrogen. Nitrogen is a simple asphyxiant, which acts to displace oxygen in the environment.

CHLORINE: Microsomal Mutageniticity Assay-Salmonella typhimurium 1800 mg/L.
Cytogenic Analysis System test (human, lymphocyte); 20 ppm Sperm Morphology-Mouse-Oral 20 mg/kg/5D-C
LCLo (inhalation, human) = 2530 mg/m3/30 minutes, pulmonary effects.
LCLo (inhalation, human) = 500/5 minutes
LC50 (inhalation, rat) = 293 ppm/1 hour
LC50 (inhalation, mouse) = 137 ppm/1 hour
LCLo (inhalation, dog) = 800 ppm/30 minutes
LCLo (inhalation, cat) = 660 ppm/4 hours
LDLo (inhalation, rabbit) = 660 ppm/4 hours

Note: Chlorine products no known systemic effects. All symptoms and signs result directly or indirectly from the local irritant action of Chlorine.

Suspected Cancer Agent: The components of this gas mixture are not found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, and IARC; therefore, they are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

Irritancy of Product: Chlorine, a component of this gas mixture, is severely, irritating to contaminated tissue.

Sensitization to the Product: The components of this gas mixture are not known to cause sensitization after prolonged or repeated exposures.

Reproductive Toxicity Information: Listed below is information concerning the effects of this product and its components on the human reproductive system.

- **Mutagenicity:** No mutagenicity effects have been described for this gas mixture. Chlorine, a component of this gas mixture, has been reported to cause mutagenic effects in human tissues during experimental studies with exposures at relatively high doses.
- **Embryotoxcity:** No embryotoxic effects have been described for this gas mixture.
- **Teratogenicity:** No teratogenicity effects have been described for this gas mixture.
- **Reproductive Toxicity:** No reproductive toxicity effects have been described for gas mixture.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generation lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generation lines. A reproductive toxin is any substance which interests in any way with the reproductive process.

Medical Conditions Aggravated by Exposure: Pre-existing dermatitis and respiratory conditions may be aggravated by over-exposure to this gas mixture.

Recommendations to Physicians: Treat symptoms; eliminate exposure. Be observant for signs of pulmonary edema.

Biological Exposure Indices (BEIs): Currently, Biological Exposure Indices (BEIs) are not applicable for the components of this gas mixture.

Ecological Information

ENVIRONMENT STABILITY: The components of this gas mixture occur naturally in the atmosphere. The gas will be dissipated rapidly in well-ventilated areas. The following environmental data are applicable to the components of this product.

Nitrogen: Water Solubility = 2.4 volumes Nitrogen/100 volumes water at 0°C and 1.6 volumes Nitrogen/100 volumes water at 20°C.
Chlorine: Water Solubility = 310 cc/ 100cc water at 10°C. 177 cc/100 cc water at 30°C. Chlorine hydrolyzes in water to product hypochlorous acid. There is not potential for bioaccumulation or bioconcentration, due to the toxicity of this substance.

Effect of Material on Plants or Animals: Due to the presence of Chlorine in this gas mixture, animals exposed to this

product may be adversely affected. Refer to Section 11 (Toxicology Information) for information obtained during clinical studies on test animals. Plants contaminated with this product may be adversely effected or destroyed.

Effect of Chemical on Aquatic Life: No evidence is currently available on this product's effects on aquatic life. The following environmental data are available for the components of this product.

CHLORINE:
LC50 (Daphnia magna/water flea) = 0.097 mg/L 30 minutes
LC50 (Daphnia magna/water flea) = 0.063 mg/L 60 minutes
LC50 (Gambusia affinis/mosquito fish) = 1.59 mg/L 30 minutes
LC50 (Gambusia affinis/mosquito fish) = 0.84 mg/L 60 minutes
TLm (Grass shrimp) = 22 mg/L/96 hours
TLm (Ocean spot_ = 0.14 mg/L24 hours; stress
TLm (Daphnia magna/water flea) = 0.07 mg/L 46 hours
LC50 (Oncorhyncus kisutsh/Coho salmon) = 208µg/L 60 minutes
TL50 (Keratella cochlearis) = 0.019 mg/L/4 hours
LC50 (Daphnia pulex) = 0.49 mg/L/96 hours
LC50 (Micropterus salmoides, largemouth bass) = 0.74 mg/L/24 hours
LC50 (Salmo gardnerii, rainbow trout) = 0.08 mg/L/168 hours
TLm (Carassium auratus, goldfish) = 0.17 mg/L/24 hours)
LC50 (Lepomis macrochirus, bluegill sunfish) = 0.44 mg/L/ 96 hours
LC50 (Pimephales prmelas, fathead minnow) = 0.1 mg/L?96 hours
Carp: 1.5-0.2 mg/L/12-16 days; 25% killed.

Disposal Considerations

PREPARING WASTE FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. Cylinders with undersired residual product may be safely vented outdoors with the proper regulator. For further information, refer to Section 16 (Other Information)

Transportation Information

This material is hazardous as defined by 49 CFR 172.101 by the U.S. department of transportation.

Proper Shipping Name: Compressed Gases, N.O.S. (Nitrogen, Chlorine)
Hazard Class Number and Description: 2.2 (Non – Flammable Gas)
UN Identification Number: UN 1956
Packing Group: Not applicable
DOT Label (s) Required: Non – Flammable Gas
North American Emergency Response Guidebook # (1996): 126

Marine Pollutant: Chlorine, a component of this gas mixture, is designated by the Department of Transportation to be a Marine Pollutant (49 CFR 172.101, Appendix B). Refer to 49 CFR 172.322 for regulations regarding markings associated with this product.

Special Shipping Information: Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well ventilated during transportation.

Note: DOT 39 Cylinders ship in a strong outer carton (overpack). Pertinent shipping information goes on the outside of the overpack. DOT 39 Cylinders do not have transportation information on the cylinder itself.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This Material is considered as Dangerous Goods. Use the above information for the preparation of Canadian Shipments.

Regulatory Information

SARA REPORTING REQUIREMENTS: The components of the gas mixture are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

COMPONENT	SARA 302	SARA 304	SARA 313
Chlorine	Yes	Yes	Yes
Nitrogen	No	No	No

SARA THRESHOLD PLANNING QUANTITY: Chlorine = 100 pounds.
TSCA INVENTORY STATUS: The components of this gas mixture are listed on the TSCA Inventory.
CERCLA REPORTABLE QUANTITY (RQ): Chlorine = 10 pounds.
OTHER U.S. FEDERAL REGULATIONS:

- Chlorine is subject to the requirements of CFR 29 1910.1000 (under the 1989 PELs). Chlorine is listed on Table Z.1.
- Depending on specific operations involving the use of this product, the regulations of the Process Safety Management of Highly Hazardous Chemicals may be applicable (29 CFR 1910.119). Under this regulation Chlorine is listed in Appendix A. The threshold quantity for Chlorine, under this regulation is 1500 lbs. Due to the small size of the cylinder for this mixture, this regulation should not apply.
- Chlorine, is subject to the reporting requirements of Section 112(r) of the Clean Air Act. The Threshold Quantity for this gas is 2500 lbs. Due to the small size of the cylinder for this mixture, this regulation should not apply.
- This gas mixture does not contain any Class I or Class II ozone depleting chemicals (40 CFR Part 82).
- Nitrogen is not listed as a Regulated Substance, per 40 CFR, Part 68, of the Risk Management for Chemical Release. Chlorine is listed under this regulation in Table 1 as a Regulated Substance (Toxic Substance), in quantities of 2500 lbs or greater. Due to the small size of the cylinder for this mixture, this regulation should not apply.

OTHER CANADIAN REGULATIONS: This gas mixture is categorized as a Controlled Product, Hazard Classes A and D2B, as per the Controlled Product Regulations.

STATE REGULATORY INFORMATION: The components of this gas mixture are covered under the following specific State regulations:

Alaska – Designated Toxic and Hazardous Substance: Chlorine.
California – Permissible Exposure Limits for Chemical Contaminants: Nitrogen Chlorine.
Florida – Substance List: Chlorine.
Illinois – Toxic Substance List: Chlorine.
Massachusetts – Substance List: Chlorine.
Minnesota – List of Hazardous Substances: Chlorine.
Missouri – Employer Information/Toxic Substance List: Chlorine.
New Jersey – Right to Know Hazardous Substance List: Nitrogen, Chlorine.
North Dakota – List of Hazardous Chemicals, Reportable Quantities: Chlorine.
Pennsylvania – Hazardous Substance List: Nitrogen, Chlorine.
Rhode Island – Hazardous Substance List: Nitrogen, Chlorine.
Texas – Hazardous Substance List: Chlorine.
West Virginia – Hazardous Substance List: Chlorine.
Wisconsin – Toxic and Hazardous Substance: Chlorine.

Other Information

INFORMATION ABOUT DOT-39 NRC (Non-Refillable Cylinder) PRODUCTS
DOT 39 cylinders ship as hazardous materials when full. Once the cylinders are relieved of pressure (empty) they are not considered hazardous material or waste. Residual gas in this type of cylinder is not an issue because toxic gas mixtures are prohibited. Calibration gas mixtures typically packed in these cylinders are Non-flammable n.o.s., UN 1956. A small percentage of calibration gases packed in DOT 39 cylinders are flammable or oxidizing gas mixtures.

For disposal of used DOT-39 cylinders, it is acceptable to place them in a landfill if local laws permit. Their disposal is no different than that employed with other DOT containers such as spray paint cans, household aerosols, or disposable cylinders of propane (for camping, torch etc.). When feasible, we recommended recycling for scrap metal content. Precision Gas Products Inc. will do this for any customer that wishes to return cylinders to us prepaid. All that is required is a phone call to make arrangements so we may anticipate arrival. Scrapping cylinders to valued customers who want to participate.

MIXTURES: When two or more gases or liquefied gases are mixed, their hazardous properties may combine to create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist or other trained person when you make your safety evaluation of the end product. Remember gases and liquids have properties, which can cause injury or death.

Further information about the handling of compressed gases can be found in the following pamphlets published by: Compressed Gas Association Inc. (CGA), 1725 Jefferson Davis Highway, Suite 1004, Arlington, VA 22202-4102. Telephone: (703) 412-0900

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This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Precision Gas Products Inc. knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, stability or completeness is not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time.