

Nitrogen, Compressed

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PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Nitrogen, Compressed
Synonyms: Nitrogen gas, Nitrogen, Nitrogen Food Grade
Common Name: Nitrogen
SDS Number: 1066
Revision Date: 3/14/2018
Version: 3
CAS Number: 7727-37-9
Chemical Formula: N₂
Product Use: Calibration of analytical instrumentation, blanketing, Food processing, Carrier gas for gas chromatography.

Supplier Details: Norco, Inc.
 1125 W. Amity Rd.
 Boise, ID 83705

Contact: Quality Dept.
Phone: 208-336-1643
Fax: 208-433-6160
Internet: www.Norco-Inc. com

For Transportation Emergency Contact CHEMTREC: 800-424-9300

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HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
 Physical, Gases Under Pressure, Compressed Gas

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H280 - Contains gas under pressure; may explode if heated
 OSHA-H01 - MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

GHS Precautionary Statements:

P202 - Do not handle until all safety precautions have been read and understood.
 P271 - Use and store only outdoors or in a well-ventilated area.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P313 - Get medical advice/attention.
 CGA-PG05 - Use a back flow preventive device in the piping.
 CGA-PG10 - Use only with equipment rated for cylinder pressure.
 CGA-PG06 - Close valve after each use and when empty.
 CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C (125 °F).

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

Route of Entry: Inhalation;
Target Organs: Respiratory system;
Inhalation: Product is a simple asphyxiant. This product may displace oxygen if released in a confined space. Maintain oxygen levels above 19.5% at sea level to prevent asphyxiation. Effects of oxygen deficiency resulting from simple asphyxiants may include: rapid breathing, diminished mental alertness, impaired muscular coordination, faulty judgment, depression of all sensations, emotional instability and fatigue. As asphyxiation progresses, nausea, vomiting, prostration and loss of consciousness may result, eventually leading to convulsions, coma and death.

Oxygen deficiency during pregnancy has produced developmental abnormalities in humans and experimental animals.

Skin Contact: Non-irritating. Contact with rapidly expanding gas near the point of release may cause frostbite with redness, skin color change to gray or white, and blistering.

Eye Contact: Non-irritating. Contact with rapidly expanding gas near the point of release may cause frostbite.

Ingestion: Not anticipated. Product is a gas at normal conditions.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients		
CAS#	%	Chemical Name
7727-37-9		Nitrogen

4 FIRST AID MEASURES

Inhalation: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO PRODUCT. RESCUE PERSONNEL SHOULD BE EQUIPED WITH SELF-CONTAINED BREATHING APPARATUS. Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. Unconscious persons should be moved to an uncontaminated area, given assisted (artificial) respiration and supplemental oxygen. The physician should be informed the patient has inhaled quantities of hydrogen sulfide.

Skin Contact: Non-irritating. None required for gas. For frostbite, immerse skin in lukewarm water. DO NOT USE HOT WATER. Obtain medical attention.

Eye Contact: Non-irritating. None Required for gas. If frostbite is suspected, flush eyes with cool water for 15 minutes and obtain immediate medical attention.

Ingestion: Not a direct hazard.

5 FIRE FIGHTING MEASURES

Flammability: Not Flammable

Flash Point: None

Flash Point Method: Not Applicable

Burning Rate: Not Applicable

Autoignition Temperature: None

Lower Explosive Limit: None

Upper Explosive Limit: None

Fire and Explosion Hazards: Nonflammable. Cylinders may rupture violently or vent rapidly from pressure when involved in a fire situation.

Extinguishing Media:
None required. Use as appropriate for surrounding materials

Fire Fighting Instructions:
Firefighters should wear respiratory protection (SCBA) and full turnout or Bunker gear. Continue to cool fire-exposed cylinders until well after flames are extinguished.

6 ACCIDENTAL RELEASE MEASURES

Evacuate all personnel from affected area. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with inert gas prior to attempting repairs. If leak is in container or valve, contact the appropriate emergency telephone number listed in section 1, or call your closest Norco/NorLab location.

7 HANDLING AND STORAGE

Handling Precautions: Use only in well-ventilated areas. Valve protection caps must remain in place unless the cylinder is secured with valve outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure regulator when connecting cylinder

to lower pressure (<3000 PSIG) piping or systems. Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous backflow into the cylinder.

For additional recommendations, consult Compressed Gas Association Pamphlets P-1.

Never carry a compressed gas cylinder or a container of a gas in cryogenic liquid form in an enclosed space such as a car trunk, van or station wagon. A leak can result in a asphyxiation.

Storage Requirements:

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area away from heavy traffic areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 125 degrees F (52 degrees C). Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated. Use a "first in-first out" inventory system to prevent full cylinders from being stored for excessive periods of time.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use local exhaust in combination with general ventilation as necessary to prevent accumulation of high concentrations and maintain air oxygen levels at or above 19.5%.

Personal Protective Equipment:

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Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M)

Splash protection: Material: Chloroprene Minimum layer thickness: 0.6 mm Break through time: 30 min Material tested: Camapren (KCL 722 / Aldrich Z677493, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Appearance:	Colorless Gas	Odor:	Odorless
Physical State:	Gas	Molecular Formula:	N ₂
Odor Threshold:	Not Applicable	Solubility:	Very slightly soluble
Particle Size:	Not Applicable	Softening Point:	Not Applicable
Specific Gravity or Density:	0.97 (Gas) Air =1	Percent Volatile:	100%
Viscosity:	Not Applicable	Freezing or Melting Point:	-210 C
Saturated Vapor Concentration:	100%	Flash Point:	Not Applicable
Boiling Point:	-195.8 C	Autoignition Temperature:	Not Applicable
Flammability:	Not Flammable	Upper Flammability Limit and Lower Flammability Limit:	Not Applicable
Vapor Pressure:	Not Determined		
Potentia Hydrogenii:	Not Determined		
Molecular weight:	28.0134 g/mol		
Decompression Temperature:	Not Determined		

Chemical Stability:	Stable under normal conditions
Conditions to Avoidentification:	None known
Materials to Avoidentification:	Metalic Lithium, Potassium Titanium, Neodymium, Zirconium, and other reactive metals. (source: NFPA)
Hazardous Decomposition:	Not known.
Hazardous Polymerization:	Will not occur.

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Information on toxicological effects

Acute toxicity:

Oral LD50 no data available

Inhalation LC50

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: May be harmful., Nausea, Headache, Vomiting

Synergistic effects: no data available

Additional Information:

RTECS: QW9700000

Product does not contain Class I or Class II ozone depleting substances. Not toxic.

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Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

Do not attempt to dispose of residual waste or unused quantities in returnable containers. Return in shipping container, properly labeled, with any valve outlet plugs or caps secured and valve protection cap in place to Norco for proper disposal.

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UNProper Shipping Name US:

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Proper Shipping Name Canada:

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Component (CAS#) [%] - CODES

Nitrogen (7727-37-9) [n/a%] MASS, PA, TSCA

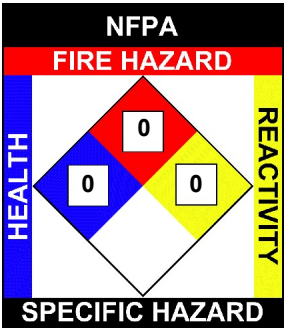
Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List

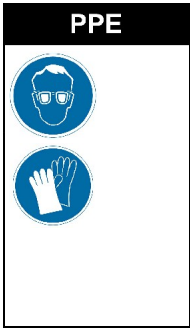
PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

NFPA: Health = 0, Fire = 0, Reactivity = 0, Specific Hazard = n/a
HMIS III: Health = 0, Fire = 0, Physical Hazard = 3
HMIS PPE: B - Safety Glasses, Gloves



HMIS		
HEALTH	0	0
FLAMMABILITY	0	0
PHYSICAL HAZARD	3	3
PERSONAL PROTECTION	B	B



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