













Product Name: Nitrogen **MSDS No.:** MSDS001 **Date:** 28 September 2010

MY GAS MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification			
Product Name:	Nitrogen	Trade Name:	Nitrogen
Product Use:	Many	UN Number:	1977
Chemical Name:	Nitrogen	Synonym:	Dinitrogen
Chemical Formula:	N2	Chemical Family:	Inert Gas
Telephone: Emergencies:	010-072 0995	Supplier /Manufacture:	My Gas
	* 0861 HELIUM	Fax:	086 508 3271
		Phone:	010-072 0995

^{*}Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product.

For routine information, contact your My Gas sales representative.

2. Hazards Identification				
EMERGENCY OVERVIEW	EMERGENCY OVERVIEW			
CAUTION! High-pressure gas.	Can cause rapid s	uffocation. May cause dizziness and drowsiness. Rescue		
workers may require self-conf	tained breathing a	apparatus.		
ROUTES OF EXPOSURE:	Inhalation.			
EFFECTS OF A SINGLE (ACUTE) OVEREXPOSURI	: :		
INHALATION:	Asphyxiate. Effe	ects are due to lack of oxygen. Moderate concentrations may		
	cause headache	s, drowsiness, dizziness, excitation, excess salivation, vomiting,		
	and unconscious	sness. Lack of oxygen can kill.		
SKIN CONTACT:	No harm expect	ed from vapour.		
SKIN ABSORPTION:	No evidence of	adverse effects from available information.		
SWALLOWING:	This product is a	gas at normal temperature and pressure.		
EYE CONTACT:	No harm expected.			
EFFECTS OF REPEATED (CHRONIC)		No evidence of adverse effects from available information.		
C	VEREXPOSURE:			
OTHER EFFECTS OF C	VEREXPOSURE:	None known.		
MEDICAL CONDITIONS A	GGRAVATED BY	The toxicology and the physical and chemical properties of this		
OVEREXPOSURE:		product suggest that overexposure is unlikely to aggravate		
		medical condition.		
SIGNIFICANT LABORATORY DATA WITH		None currently known.		
POSSIBLE RELEVANCE TO HUMAN HEALTH				
HAZARD EVALUATION:				
CARCINOGENICITY:	Not listed as car	cinogen.		

3. Composition and Information on Ingredients		
COMPONENTS: Nitrogen		
UN NUMBER: 1977		
CONCENTRATION % by Mole:	100	

4. First Aid Meas	4. First Aid Measures		
INHALATION:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is		
	difficult, give oxygen. Get medical attention immediately.		
SKIN CONTACT:	None expected.		
SWALLOWING:	This product is a gas at normal temperature and pressure.		
EYE CONTACT:	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.		
	See a physician, preferably an ophthalmologist, immediately.		
NOTES TO	There is no specific antidote. Treatment of over-exposure should be directed at the		
PHYSICIAN:	control of symptoms and the clinical condition.		

















5. Fire Fighting Measures		
FLAMMABLE: No	IF YES, UNDER WHAT CONDITIONS? Not applicable.	
EXTINGUISHING MEDIA: This material cannot catch	PRODUCTS OF COMBUSTION: None	
fire. Use media appropriate for surrounding fire.		
PROTECTION OF FIREFIGHTERS:		

CAUTION! High-pressure gas. Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool; then move them away from fire area if without risk.

SPECIFIC PHYSICAL AND CHEMICAL HAZARDS:

Gas cannot catch fire. Container may rupture due to heat of fire. No part of a container should be subjected to a temperature higher than 25°C. Most containers are provided with a pressure relief device designed to vent contents when they are exposed to elevated temperature.

contents they are exposed to circuited temperature.			
SENSITIVITY TO IMPACT:	SENSITIVITY TO STATIC DISCHARGE:		
Avoid impact against container.	Not applicable.		
PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE	FIGHTERS:		
Fire fighters should wear self-contained breathing apparatus and full fire-fighting turnout gear.			
FLAMMABLE LIMITS IN AIR, % by volume:			
LOWER: Not applicable. UPPER: Not applicable.			
FLASH POINT: Not applicable.	AUTOIGNITION TEMPERATURE: Not applicable.		

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

PERSONAL PRECAUTIONS:

CAUTION! High-pressure gas. Evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Shut off flow if you can do so without risk. Ventilate area or move cylinder to a well-ventilated area. Test for sufficient oxygen, especially in confined spaces, before allowing re-entry.

ENVIRONMENTAL PRECAUTIONS:

Slowly release into atmosphere outdoors. Keep personnel away. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with local regulations. If necessary, call your local supplier for assistance.

7. Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING:

Protect cylinders from damage. Use a suitable hand truck to move cylinders do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact My Gas. For other precautions, see section 16.

PRECAUTIONS TO BE TAKEN IN STORAGE:

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 25°C. Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:

High-pressure gas. Use piping and equipment adequately designed to withstand pressures to be encountered. Gas can cause rapid suffocation due to oxygen deficiency. Store and use with adequate ventilation. Close valve after each use; keep closed even when empty. Prevent reverse flow. Reverse flow into cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. When returning cylinder to supplier, be sure valve is closed, then install valve outlet plug tightly. Never work on pressurized system. If there is a leak, close the cylinder valve. Vent the system down in a safe and environmentally sound manner in compliance with all federal, provincial, and local laws; then repair the leak. Never place a compressed gas cylinder where it may become part of an electrical circuit.

RECOMMENDED PUBLICATIONS:

Additional information on storage, handling, and use of this product is available from the South African Compressed Gas Association (SACGA).

















8. Exposure Controls/Personal Protection						
INGREDIENTS	UN NUMBER LD50(Species & Routes) LC50 (Rat, 4 hrs.) Exposure Lin					
Nitrogen	1977 Not applicable Not available Simple asphy.					
IMMEDIATELY DANG	EROUS TO LIFE AND HI	EALTH (IDLH):				
VENTILATION/ENGIN	EERING CONTROLS:					
LOCAL EXHAUST:	Use a local exhaust s	ystem, if necessary, to	maintain an adequat	e supply of oxygen in		
	the worker's breathin	g zone.				
MECHANICAL	Acceptable if it can r	maintain an adequate	supply of oxygen in th	ne worker's breathing		
(General):	zone.					
SPECIAL:	None					
OTHER:	None					
PERSONAL PROTECTION:						
RESPIRATORY PROTECTION: Use air supplied respirator when working in confined space or where local						
exhaust or ventilation does not keep exposure below a safe level. Select in accordance with the South African						
regulations or guidelines.						
SKIN PROTECTION: Wear work gloves when handling cylinders.						
EYE PROTECTION: Wear safety glasses when handling cylinders.						
OTHER PROTECTIVE EQUIPMENT: Metatarsal shoes for cylinder handling. Protective clothing where needed.						

9. Physical and Chemical Properties			
PHYSICAL STATE: Gas	FREEZING POINT: -209.9°C		pH: Not applicable
BOILING POINT: -195.8°C	VAPOUR PRESSURE: NA		MOLECULAR WEIGHT: 28.01g/mole
EVAPORATION RATE: NA (Butyl	ODOUR THRESHOLD: Odourless		SOLUBILITY IN WATER: Negligible
Acetate = 1)			
SPECIFIC GRAVITY: NA Liquid (water=1) COEFI		COEFFICIE	NT OF WATER/OIL DISTRIBUTION: NA
SPECIFIC GRAVITY: 0.97g/ml @ 21.1 C VAPOUR (air=1)		VAPOUR DENSITY: 0.00115 g/ml @ 21.1 C	
% VOLATILES BY VOLUME: 100% (v/v)		APPEARAN	ICE & ODOUR: Colourless. Odourless

10. Stability and Reactivity	
STABILITY:	The product is stable.
CONDITIONS OF CHEMICAL INSTABILITY:	Elevated temperatures
INCOMPATIBILITY (materials to avoid):	Under certain conditions, nitrogen can react violently with lithium, neodymium, titanium (above 800°c) and magnesium to form nitrides. At high temperature it can also combine with oxygen and hydrogen.
HAZARDOUS DECOMPOSITION PRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	None
CONDITIONS OF REACTIVITY:	None

11. Toxicological Inf	ormation
ACUTE DOSE EFFECTS:	No specific information is available in our database regarding the other toxic effects of this material for humans.
STUDY RESULTS:	

12. Ecological Information

No adverse ecological effects expected. This product does not contain any Class I or Class II ozone depleting chemicals.















13. Disposal Considerations WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

14. Transport Information			
TDG/IMO	SHIPPING NAME:	Nitrogen, (Compressed
HAZARD CLASS: CLASS 2.2: IDENTIFICATION #		#: UN1977 PRODUCT RQ: Any accidental release in	
Non-flammable, non-corrosive and			quantity that could pose a danger to
non-poisonous gas.			public safety or any sustained release of
			10 minutes or more.
SHIPPING LABEL(s):	Non-flammable, non-poisonous gas		
PLACARD (When Required):	Non-flammable, non-poisonous gas		
SPECIAL SHIPPING INFORMATION:	•		

Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, non-ventilated compartment of vehicle can present serious safety hazards.

15. Regulatory Information

Users of this product are solely responsible for compliance with all applicable laws and local regulations.

16. Other Information

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 serious injury or death.

My Gas asks users of this product to study this MSDS and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this MSDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.