

Safety Data Sheet

according to WHS Regulations

Printing date 20.01.2022

Revision: 20.01.2022

1 Identification

Product Name: NITROGEN**Recommended Use of the Chemical and Restriction on Use:** Industrial use**Details of Manufacturer or Importer:**

Tesuco Pty Limited

Unit 12

110-120 Silverwater Road,

Silverwater NSW 2128

Phone Number: +61 2 9737 9937**Emergency telephone number:** National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



gas cylinder

Gases Under Pressure (Compressed gas) H280 Contains gas under pressure; may explode if heated.

Signal Word Warning**Hazard Statements**

H280 Contains gas under pressure; may explode if heated.

Precautionary Statements

P410+P403 Protect from sunlight. Store in a well-ventilated place.

3 Composition and Information on Ingredients

Chemical Characterisation: Substances**CAS No. Description**

7727-37-9 - Nitrogen

Hazardous Components:

7727-37-9 Nitrogen

Gases Under Pressure (Compressed gas), H280

100%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact: No adverse effects are expected.**Eye Contact:** No adverse effects are expected.**Ingestion:** Ingestion is not considered a potential route of exposure.**Symptoms Caused by Exposure:**

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Inhalation: Asphyxiant gas. It can cause rapid suffocation when concentrations are sufficient to reduce oxygen levels below 19.5%. Exposure to an oxygen deficient atmosphere (<19.5%) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help themselves.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water spray or fog. Do not use water jet.

Specific Hazards Arising from the Chemical:

Nitrogen is a simple asphyxiant.

Upon exposure to intense heat or flame cylinder may vent rapidly and/or rupture violently. Pressure in a container can build up due to heat and it may rupture if pressure relief devices should fail to function.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours or gas. Increase ventilation and monitor oxygen level. Extinguish all sources of heat.

Environmental Precautions: Inform authorities in case of gas release. Try to stop release.

Methods and Materials for Containment and Cleaning Up:

In case of a leak or of an emergency disposal, secure the cylinder and slowly discharge the gas to the atmosphere in a well-ventilated area or outdoors. Allow the gas mixture to dissipate. Do not attempt to repair leaking valve or cylinder safety devices.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid inhalation of vapours. Ensure good ventilation at the workplace.

Do not drag, drop, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Never attempt to lift a cylinder by its cap. Secure cylinders at all times while in use. Use a pressure reducing regulator or separate control valve to safely discharge gas from cylinder. Use a check valve to prevent reverse flow into cylinder. Do not overheat cylinder to increase pressure or discharge rate. If user experiences any difficulty operating cylinder valve, discontinue use and contact supplier. Never insert an object (e.g., wrench, screwdriver, pry bar, etc.) into valve cap openings. Doing so may damage valve causing a leak to occur. Use a special cap wrench or adjustable strap-wrench to remove over-tight or rusted caps.

Conditions for Safe Storage:

Cylinders should be stored in a dry, well ventilated, secure area with firm level floor (preferably concrete), upright and restrained to avoid falling. Keep at temperatures below 50 °C. Valve protection caps and valve outlet seals should remain on cylinders not connected for use. Separate full from empty cylinders. Protect from heat, sparks, open flames and other ignition sources. Avoid heating cylinders.

8 Exposure controls and personal protection

Exposure Standards:

7727-37-9 Nitrogen

NES	Asphyxiant
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Engineering Controls:

Provide good ventilation and/or local exhaust to prevent accumulation of high concentrations of gas. Oxygen levels in work area should be monitored to ensure they do not fall below 19.5%.

Respiratory Protection:

Use approved full face supplied air respirator if oxygen concentration is less than 19.5%. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Leather, wool or aramid blend gloves . See Australian/New Zealand Standard AS/NZS 2161 for more information.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing) and safety shoes. See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against gas. See Australian/New Zealand Standard AS/NZS 1337.

9 Physical and Chemical Properties

Appearance:

Form:	Gaseous
Colour:	Colourless
Odour:	Odourless
Odour Threshold:	None
Melting point/freezing point:	-210 °C
Initial Boiling Point/Boiling Range:	-196 °C
Flash Point:	Not applicable
Flammability:	Non flammable
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	Not applicable
Vapour Density at 20 °C:	0.97 g/cm ³
Solubility in Water at 20 °C:	20 mg/L
Additional Information:	Critical temperature: -147 °C

10 Stability and Reactivity

Possibility of Hazardous Reactions: No hazardous reactions will occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames and other ignition sources. Avoid heating cylinders.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products: No hazardous decomposition products known.

11 Toxicological Information

Toxicity:**Acute Health Effects****Inhalation:**

Asphyxiant gas. It can cause rapid suffocation when concentrations are sufficient to reduce oxygen levels below 19.5%. Lack of sufficient oxygen can cause serious injury or death.

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Exposure to an oxygen deficient atmosphere (<19.5%) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help themselves.

Skin: No adverse effects are expected.

Eye: No adverse effects are expected.

Ingestion: Ingestion is not considered a potential route of exposure.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: No sensitising effects known.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Not applicable

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

12 Ecological Information

Ecotoxicity:

The atmosphere contains approximately 78% nitrogen. No adverse ecological effects are expected.

Aquatic toxicity:

This product has no known eco-toxicological effects.

No information available

Persistence and Degradability: This product has no known eco-toxicological effects.

Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: No information available

13 Disposal considerations

Disposal Methods and Containers:

Non-returnable containers must not be refilled. Dispose of non-returnable containers according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport information

UN Number

ADG, IMDG, IATA

UN1066

Proper Shipping Name
IATA

NITROGEN, COMPRESSED
Cargo
Pkg Inst: 200

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Max Net Qty/Pkg: 150kg
 Passenger
 Pkg Inst: 200
 Max Net Qty/Pkg: 75kg

Dangerous Goods Class**ADG Class:** 2.2**Packing Group:** Not applicable**Marine pollutant:** No**EMS Number:** F-C,S-V**Hazchem Code:** 2T**Special Provisions:** Not applicable**Limited Quantities:** 120 ml**Packagings & IBCs - Packing Instruction:** P200

15 Regulatory information

Australian Inventory of Chemical Substances:

7727-37-9 Nitrogen

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
 Not Scheduled.

16 Other information

Date of Preparation or Last Revision: 06.03.2017**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Gases Under Pressure (Compressed gas): Gases under pressure – Compressed gas

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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