

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** NITROGEN, COMPRESSED  
**Synonyms** PRODUCT CODE: SG032

### 1.2 Uses and uses advised against

**Uses** INERT GAS • PNEUMATIC EQUIPMENT • TYRE INFLATION

### 1.3 Details of the supplier of the product

**Supplier name** ELGAS LTD (STARGAS)  
**Address** 10 Julius Ave, North Ryde, NSW, 2113, AUSTRALIA  
**Telephone** 131 161  
**Website** <https://www.stargas.com.au/>

### 1.4 Emergency telephone numbers

**Emergency** 1800 819 783 (24 hours)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### Physical Hazards

Gases Under Pressure: Compressed gas

#### Health Hazards

Not classified as a Health Hazard

#### Environmental Hazards

Not classified as an Environmental Hazard

### 2.2 GHS Label elements

**Signal word** WARNING

**Pictograms**



#### Hazard statements

H280 Contains gas under pressure; may explode if heated.

#### Prevention statements

None allocated.

#### Response statements

None allocated.

#### Storage statements

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

#### Disposal statements

None allocated.

## PRODUCT NAME    NITROGEN, COMPRESSED

### 2.3 Other hazards

Asphyxiant. Effects are proportional to oxygen displacement.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

| Ingredient | CAS Number | EC Number | Content (v/v) |
|------------|------------|-----------|---------------|
| NITROGEN   | 7727-37-9  | 231-783-9 | >99.9%        |

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

|                      |   |
|----------------------|---|
| Eye                  | Adverse effects not expected from this product.   |
| Inhalation           | If inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator or Self Contained Breathing Apparatus (SCBA). Apply artificial respiration if not breathing. Give oxygen if available. For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. |
| Skin                 | Adverse effects not expected from this product.   |
| Ingestion            | Ingestion is not considered a potential route of exposure.  |
| First aid facilities | None allocated.   |

### 4.2 Most important symptoms and effects, both acute and delayed

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility / consciousness. Victim may not be aware of asphyxiation.

### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Use water fog to cool containers from protected area.

### 5.2 Special hazards arising from the substance or mixture

Non flammable.

### 5.3 Advice for firefighters

Temperatures in a fire may cause cylinders to rupture. Cool cylinders or containers exposed to fire by applying water from a protected location. Remove cool cylinders from the path of the fire. Evacuate the area if unable to keep cylinders cool. Do not approach cylinders or containers suspected of being hot.

### 5.4 Hazchem code

2T  
2     Fine Water Spray.  
T     Wear full fire kit and breathing apparatus. Dilute spill and run-off.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

If the cylinder is leaking, evacuate area of personnel. Inform manufacturer/supplier of leak. Use Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.

### 6.2 Environmental precautions

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

### 6.3 Methods of cleaning up

Carefully move material to a well ventilated remote area, then allow to discharge if safe to do so. Do not attempt to repair leaking valve or cylinder safety devices.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Use of safe work practices are recommended to avoid inhalation. Do not drag, drop, slide or roll cylinders. The uncontrolled release of a gas under pressure may cause physical harm. Use a suitable hand truck for cylinder movement.

### 7.2 Conditions for safe storage, including any incompatibilities

Do not store near incompatible materials. Cylinders should be stored below 65°C in a secure area, upright and restrained to prevent cylinders from falling. Cylinders should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits.

### 7.3 Specific end uses

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

| Ingredient | Reference | TWA        |                   | STEL |                   |
|------------|-----------|------------|-------------------|------|-------------------|
|            |           | ppm        | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Nitrogen   | SWA [AUS] | Asphyxiant |                   |      |                   |

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

#### PPE

|                    |  |
|--------------------|--|
| <b>Eye / Face</b>  | Wear safety glasses.   |
| <b>Hands</b>       | Wear leather gloves.   |
| <b>Body</b>        | Wear safety boots.   |
| <b>Respiratory</b> | Where an inhalation risk exists, wear Self Contained Breathing Apparatus (SCBA) or an Air-line respirator. |



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|                                  |   |
|----------------------------------|---|
| <b>Appearance</b>                | COLOURLESS GAS                          |
| <b>Odour</b>                     | ODOURLESS                               |
| <b>Flammability</b>              | NON FLAMMABLE                           |
| <b>Flash point</b>               | NOT RELEVANT                            |
| <b>Boiling point</b>             | -195.8°C                                |
| <b>Melting point</b>             | NOT AVAILABLE                           |
| <b>Evaporation rate</b>          | NOT APPLICABLE                          |
| <b>pH</b>                        | NOT APPLICABLE                          |
| <b>Vapour density</b>            | 0.967 (Air = 1)                         |
| <b>Relative density</b>          | NOT APPLICABLE                          |
| <b>Solubility (water)</b>        | 0.0149 cm <sup>3</sup> /cm <sup>3</sup> |
| <b>Vapour pressure</b>           | NOT AVAILABLE                           |
| <b>Upper explosion limit</b>     | NOT RELEVANT                            |
| <b>Lower explosion limit</b>     | NOT RELEVANT                            |
| <b>Partition coefficient</b>     | NOT AVAILABLE                           |
| <b>Autoignition temperature</b>  | NOT AVAILABLE                           |
| <b>Decomposition temperature</b> | NOT AVAILABLE                           |

**PRODUCT NAME    NITROGEN, COMPRESSED**

**9.1 Information on basic physical and chemical properties**

|                      |               |
|----------------------|---------------|
| Viscosity            | NOT AVAILABLE |
| Explosive properties | NOT AVAILABLE |
| Oxidising properties | NOT AVAILABLE |
| Odour threshold      | NOT AVAILABLE |

**9.2 Other information**

|                               |                        |
|-------------------------------|------------------------|
| % Volatiles                   | 100 %                  |
| Cylinder pressure (when full) | 13000 kPa to 30000 kPa |

---

**10. STABILITY AND REACTIVITY**

---

**10.1 Reactivity**

Unreactive under normal conditions.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization will not occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Compatible with most commonly used materials. Avoid heating cylinders.

**10.6 Hazardous decomposition products**

May evolve toxic gases if heated to decomposition.

---

**11. TOXICOLOGICAL INFORMATION**

---

**11.1 Information on toxicological effects**

|                          |  |
|--------------------------|--|
| Acute toxicity           | Based on available data, the classification criteria are not met.  |
| Skin                     | Not classified as a skin irritant.   |
| Eye                      | Not classified as an eye irritant.   |
| Sensitisation            | Not classified as causing skin or respiratory sensitisation.   |
| Mutagenicity             | Not classified as a mutagen.   |
| Carcinogenicity          | Not classified as a carcinogen.  |
| Reproductive             | Not classified as a reproductive toxin.  |
| STOT - single exposure   | Asphyxiant. Effects are proportional to oxygen displacement. Over exposure may result in dizziness, drowsiness, weakness, fatigue, breathing difficulties and unconsciousness. |
| STOT - repeated exposure | Not classified as causing organ damage from repeated exposure.   |
| Aspiration               | Not classified as causing aspiration.  |

---

**12. ECOLOGICAL INFORMATION**

---

**12.1 Toxicity**

No ecological damage caused by this product. Nitrogen is the major component of the atmosphere (78 % v/v). It is a fairly unreactive gas and will not contribute to ozone depletion or global warming. If released to soil or water, nitrogen will quickly disperse to the atmosphere. Not toxic to plants or animals except at extremely high (asphyxiating) levels.

**12.2 Persistence and degradability**

Nitrogen occurs naturally in the atmosphere. The gas will be dissipated rapidly in well-ventilated areas.

**12.3 Bioaccumulative potential**

Not applicable.

**12.4 Mobility in soil**

The substance is a gas, not applicable.

**PRODUCT NAME NITROGEN, COMPRESSED****12.5 Other adverse effects**

No information provided.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**Waste disposal** Cylinders should be returned to the manufacturer or supplier for disposal of contents.

**Legislation** Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



|                                    | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|------------------------------------|----------------------|----------------------------|-----------------------------|
| <b>14.1 UN Number</b>              | 1066                 | 1066                       | 1066                        |
| <b>14.2 Proper Shipping Name</b>   | NITROGEN, COMPRESSED | NITROGEN, COMPRESSED       | NITROGEN, COMPRESSED        |
| <b>14.3 Transport hazard class</b> | 2.2                  | 2.2                        | 2.2                         |
| <b>14.4 Packing Group</b>          | None allocated.      | None allocated.            | None allocated.             |

**14.5 Environmental hazards**

No information provided.

**14.6 Special precautions for user**

**Hazchem code** 2T

**GTEPG** 2C1

**EmS** F-C, S-V

**Other information** Ensure cylinder is separated from driver and that outlet of relief device is not obstructed.

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Poison schedule** A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Classifications** Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

**Inventory listings** **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**  
All components are listed on AIIC, or are exempt.

**16. OTHER INFORMATION**

**Additional information** The storage of significant quantities of gas cylinders must comply with AS4332 The storage and handling of gases in cylinders.

APPLICATION METHOD: Gas regulator of suitable pressure and flow rating fitted to cylinder or manifold with low pressure gas distribution to equipment.

**PRODUCT NAME    NITROGEN, COMPRESSED****PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

|                   |   |
|-------------------|---|
| ACGIH             | American Conference of Governmental Industrial Hygienists                                       |
| CAS #             | Chemical Abstract Service number - used to uniquely identify chemical compounds                 |
| CNS               | Central Nervous System  |
| EC No.            | EC No - European Community Number   |
| EMS               | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)                   |
| GHS               | Globally Harmonized System  |
| GTEPG             | Group Text Emergency Procedure Guide  |
| IARC              | International Agency for Research on Cancer   |
| LC50              | Lethal Concentration, 50% / Median Lethal Concentration   |
| LD50              | Lethal Dose, 50% / Median Lethal Dose   |
| mg/m <sup>3</sup> | Milligrams per Cubic Metre  |
| OEL               | Occupational Exposure Limit   |
| pH                | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm               | Parts Per Million   |
| STEL              | Short-Term Exposure Limit   |
| STOT-RE           | Specific target organ toxicity (repeated exposure)  |
| STOT-SE           | Specific target organ toxicity (single exposure)  |
| SUSMP             | Standard for the Uniform Scheduling of Medicines and Poisons                                    |
| SWA               | Safe Work Australia   |
| TLV               | Threshold Limit Value   |
| TWA               | Time Weighted Average   |

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**Prepared by**

Risk Management Technologies  
5 Ventnor Ave, West Perth  
Western Australia 6005  
Phone: +61 8 9322 1711  
Fax: +61 8 9322 1794  
Email: [info@rmt.com.au](mailto:info@rmt.com.au)  
Web: [www.rmtglobal.com](http://www.rmtglobal.com)

**[ End of SDS ]**