

# SAFETY DATA SHEET



Ref: GCS/SDS/0004

## Nitrogen (N<sub>2</sub>)

### 01 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product Name	Nitrogen
Chemical Formula	N <sub>2</sub>
Company Identification	See footer
Emergency Phone Numbers	See footer



Label 2.2  
Non flammable, non toxic gas

### 02 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation	Substance
Contents	100%
Components/Impurities	Contains no other components or impurities which will influence the classification of the product.
CAS Nr	7727-37-9
EEC Nr (from NINECS)	231-783-9

### 03 HAZARDS IDENTIFICATION

Hazards identification	Compressed gas. In high concentrations may cause asphyxiation.
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### 04 FIRST AID MEASURES

Inhalation	In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
Ingestion	Ingestion is not considered a potential route of exposure.

### 05 FIRE FIGHTING MEASURES

Specific hazards	Exposure to fire may cause containers to rupture/explode. Non flammable.
Hazardous combustion products	None.
Suitable extinguishing media	All known extinguishers can be used.  Move away from the container and cool with water from a protected position.
Special protective equipment for fire fighters	In confined space use self-contained breathing apparatus.

### 06 ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate Area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved be safe. Ensure adequate air ventilation.
Environmental precautions	Try to stop release only if safe to do so.
Clean up methods	Ventilate area.

### 07 HANDLING AND STORAGE

Handling and storage.	Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. If in any doubt, contact your gas supplier. Refer to supplier's container handling instructions. Keep container below 50°C in well ventilated place.
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### 08 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection	Ensure adequate ventilation.
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### 09 PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight	28
Melting point	-210°C.
Boiling point	-196 °C.
Critical temperature	-147°C.
Relative density, gas	0.97 (air=1).
Relative density, liquid	Not applicable
Vapour Pressure 20°C	Not applicable
Odour	No odour warning properties.
Solubility mg/1 water	20 mg/1.
Appearance/Colour	Colourless gas.
Other data	Gas/vapour lighter than air. May accumulate in confined spaces.

**10 STABILITY AND REACTIVITY**

Stability and reactivity Stable under normal conditions.

**11 TOXICOLOGICAL INFORMATION**

General No known toxicological effects from this product.

**12 ECOLOGICAL INFORMATION**

General No known ecological damage caused by this product.

**13 DISPOSAL CONSIDERATIONS**

General Do not discharge into any place where its accumulation could be dangerous.

To atmosphere in a well ventilated place.

Discharge to atmosphere in large quantities should be avoided.

Contact supplier if guidance is required.

**14 TRANSPORT INFORMATION**

Proper shipping name Nitrogen, Compressed

UN Nr 1066

ADR Class 2

ADR/RID Classification 1A

code

ADR/RID Hazard Nr 20

Labelling ADR Label 2.2: non flammable non toxic gas

Other transport information Avoid transport on vehicles where the load space is not separated from the driver's compartment.

Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

Before transporting product containers, ensure that they are firmly secured and:-

- cylinder valve is closed and not leaking.
- valve outlet cap nut or plug (where required) is correctly fitted.
- valve protection device (where provided) is correctly fitted.
- there is adequate ventilation.
- compliance with applicable regulations.

**15 REGULATORY INFORMATION**

EC Classification Not Classified as dangerous preparation/substance.

EC Labelling Symbols, R&S Phrases) No EC labelling required

**16 OTHER INFORMATION**

Asphyxiant in high concentrations

Keep container in well ventilated place.

Do Not breathe the gas.

Ensure all national/local regulations are observed.

The hazard of asphyxiation is often overlooked and must be stressed during operator training.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Details given in this document are believed to be correct at the time of going to press. Whilst proper care as been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

The MSDS is for information purposes only and is subject to change without notice. [Prior to purchase of products, please contact Gas Container Services Limited for a complete MSDS (with Manufacturer's name and emergency phone number).]