

NITROGEN (COMPRESSED)

1. Identification of the Substance/Preparation and of the Company

Product Name: Nitrogen

Chemical Formula: N₂Company Identification: Messer UK Ltd.
Cedar House
39 London Road, Reigate
Surrey, RH2 9QE

Emergency Telephone No: 01675 462695

2. Composition/Information on IngredientsSubstance/Preparation : Substance
CAS No : 07727-37-9
EC No (from EINECS) : 2317839

Components/Impurities: Contains no other components or impurities which will influence the classification of the product.

3. Hazardous PropertiesCompressed Gas.
In high concentrations may cause asphyxiation.**4. 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 has stopped.

Ingestion is not considered a potential route of exposure.

5. Fire Fighting Measures**Suitable Extinguishing Media:**
All known extinguishants can be used.**Specific Methods:**
If possible, stop flow of product.
Move container away or cool with water from a protected position.**Hazardous Combustion Products:**
None.**Special protective equipment for fire fighters:**
In confined space use self contained breathing apparatus.**Specific Hazards:**
Exposure to fire may cause containers to rupture/explode. Non-flammable.**6. Accidental Release Measures****Personal Precautions**

Evacuate area. Ensure adequate air ventilation. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

Environmental PrecautionsTry to stop release.
Prevent from entering sewers, basements and workpits, or any place where accumulation can be dangerous.**Clean Up Methods**

Ventilate area

7. Handling and Storage

Ingestion:

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Suck back of water into the containers 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. Contact Messer UK Ltd. if in doubt.

Refer to supplier's container handling instructions.

Keep container below 50°C in a well ventilated place.

8. Exposure Controls/Personal Protection

Exposure Limit Value for Country:
Nitrogen is a simple asphyxiant.

Personal Protection:

Ensure adequate ventilation.

9. Physical and Chemical Properties

Appearance/Colour : Colourless Gas
Odour : Odourless.

Molecular Weight : 28
Melting Point : -210°C
Boiling Point : -196°C
Critical Temperature : -147°C
Relative Density (gas) : 0.97 (air = 1)
Solubility (mg/l water) : 20

Other Data : Gas/vapour may accumulate in confined spaces.

10. Stability and Reactivity

Stable under normal conditions.

11. Toxicological Information

No known toxicological effects from this product.

12. Ecological Information

No known ecological damage caused by this product.

13. Disposal Considerations

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

Contact Messer UK Ltd. if guidance is required.

14. Transport Information

LN No. : 1066
Class/Div : 2.2
ADR/RID Item No : 2.1⁰A
Hazard Identification No : 20
Emergency Action Code : 2T
Groupcard No : 20g22
Labelling ADR : Label 2 ;
non-flammable,
non toxic gas

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 check that they are firmly secured and ensure:

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

15. Regulatory Information

Number in Annex 1 of Directive 67/548 : not included

EC Classification : not classified as a dangerous substance

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Symbols

Road transport symbols are used and selected according to the most stringent product classification - EC or ADR

Label 2 : Non-flammable, non-toxic gas

Risk Phrases

RA5 Asphyxiant in high concentration

Safety Phrases

S9 Keep container in a well ventilated area.
S23 Do not breathe gas

Messer UK Ltd. Label Number 682 (GB)

16. Other Information

Cylinder Identification

Valve Connection :BS341 No.3

Cylinder Colour:

Body :Grey (630)
Shoulder :Black

European Cylinder Colour (Proposed)

Cylinder Shoulder :Black (RAL 9005)

General

Ensure all national/local requirements are observed.
Ensure operators understand the flammability hazard.
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 has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

Refer to Messer UK Ltd General Safety & Handling Data Sheet for further details
