

MATERIAL SAFETY DATA SHEET

PRODUCT: NITROGEN

1. PRODUCT IDENTIFICATION AND COMPANY DETAILS

Product: Nitrogen, compressed
Chemical formula: N₂
Company name: Prime Co. (Middle East) Ltd.
Company contact: +971-4-8816820

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Preparation: Substance
Components / Impurities: Contains no other components or impurities which will influence the classification of product.
CAS Number: 7727-37-9

3. HAZARDS IDENTIFICATION

Hazards identification: Compressed gas in high concentration may cause dizziness, drowsiness and asphyxiation.

4. FIRST AID MEASURES

Inhalation: Immediately remove to fresh air.
Ingestion: This product is gas at normal temperature and pressure. It is not considered a potential route for exposure.
Eye contact: An unlikely route of exposure. This product is gas at normal temperature and pressure.

5. PHYSICAL & CHEMICAL PROPERTIES

Appearance: Colourless, odourless at normal temperature and pressure
Odour: None
Physical state: Gas at normal temperature and pressure
Melting point: - 210 °C
Boiling point: - 195.8 °C
Vapour density: 1.160 kg/m³ at 21.1 °C and 1 atm
Vapour pressure: Not applicable
Solubility in water: 20 mg/l
Flammable limits: Not applicable
Autoignition Temperature: Not applicable
Molecular weight: 28.01
Molecular formula: N₂

6. FIRE FIGHTING MEASURES

Flammable Properties: Nitrogen cannot catch fire.

Suitable extinguishing media: Use media appropriate for surrounding fire.

Products of combustion: None

Specific methods: Heat of fire can build pressure in cylinder, hence move away from container. Immediately cool cylinder using water.

Special protective equipment for firefighting: Use self contained breathing apparatus.

7. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

In compatible materials: None know.

8. TOXICOLOGICAL INFORMATION

None known. Nitrogen is a simple asphyxiant.

9. ECOLOGICAL INFORMATION

Ecotoxicity: No known effects

10. DISPOSAL PROCEDURES

Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

11. ACCIDENTAL RELEASE MEASURES

Personal precautions: Shut off valve if without risk. Move cylinder to well ventilated area. Evacuate area and ensure adequate ventilation.

Environmental precautions: Try to stop release.

12. HANDLING AND STORAGE

Precautions to be taken in handling: Protect cylinders from damage. Do not drag, slide, roll or drop cylinders. Never attempt to lift cylinders by its cap as the cap is intended to protect the valve. Slowly open valve. Close cylinder valve after each use and keep closed even when cylinder is empty. Never apply heat or flame to any part of cylinder.

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. Store cylinders below 50 °C.

13. TRANSPORT INFORMATION

UN Number: 1066
Hazard Class: 2.2
Labeling ADR Label 2: non flammable non toxic gas

Other information: Avoid transport on vehicles where the load space is not separated from driver's compartment. The vehicle driver must be aware of the potential hazards of the cylinders and knows what to do in the event of an accident or emergency. Before transporting cylinders ensure that they are firmly secured in the vehicle, cylinder valve is closed, valve protection is in place, adequate ventilation and compliance with local regulations.

14. REGULATORY INFORMATION

Labeling of cylinder
- Label 2: non flammable non toxic gas

15. OTHER INFORMATION

Ensure all national / local regulations are observed and adhered to. Ensure that the operators understand the hazard of nitrogen enrichment. 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.

The MSDS is based on reliable sources. Sufficient care has been taken in preparation of this document, however no liability for injury or damage resulting from its use can be accepted.

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