

SAFETY DATA SHEET

Oxygen Free Nitrogen

Version 1.0

Revision Date: 28.09.2011



SAFETY DATA SHEET OXYGEN FREE NITROGEN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Product name: OXYGEN FREE NITROGEN (OFN)
EC Number: 231-783-9
REACH Registration Number: Listed in Annex IV/V REACH, exempted from registration.
CAS Number: 007727-37*9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial and professional. Perform risk assessment before use.
Advised Against:

1.3. Details of the supplier of the safety data sheet

Company name: National Refrigerants Ltd.
4 Watling Close
Sketchley Meadows Business Park
Hinckley LE10 3EZ
Tel: +44(0)1455 630790
Fax: +44(0) 1455 630791
Email: sds@nationalref.com

1.4. Emergency telephone number

Emergency Tel: +44(0) 1865 407333

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance of mixture

Hazard Class and Category
Code Regulation EC 1272/2008
(CLP):

Physical Hazard: Gasses under pressure – Compressed gas - Warning (H280)

Classification EC 67/648 or EC Not included in Annex VI
1999/45 Not classified as dangerous preparation/substance.
No EC labelling required.

2.2. Label elements

Labelling Regulation EC
1272/2008 (CLP)
Hazard pictograms



Hazard pictogram code: GHS04
Signal word; Warning
Hazard statements
Storage: P403: Store in a well-ventilated place

Labelling EC 67/548 or EC
1999/45
Symbol(s):

None

SAFETY DATA SHEET

Oxygen Free Nitrogen

Version 1.0

Revision Date: 28.09.2011



R Phrase(s): None
S Phrase(s): None

2.3. Other hazards

Asphyxiant in high concentrations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

NITROGEN

EINECS	CAS	Index No.	Registration No.	Classification	Percent
231-783-9	7727-37-9	-	NOTE 1	Press gas (H280)	100%

Contains no other components or impurities which will influence the classification of the product,

NOTE 1: Listed in Annex IV / V REACH, exempted from registration.

NOTE 2: Registration deadline not expired.

SECTION 4: FIRST AID MEASURES

4.1. Description of 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 fresh air wearing a self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stops.

Eye contact: Not a route of exposure.

Ingestion: Not a route of exposure.

Skin contact: Not a route of exposure.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: All known extinguishants can be used. .

5.2. Special hazards arising from the substance or mixture

Special hazards arising from the mixture Exposure of cylinders to fire may cause the cylinders to rupture or explode.

5.3. Advice for fire-fighters

Advice for fire-fighters: Move away from cylinders and keep cool with water spray from a protected position. If in a confined space use a self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Environmental precautions: Try to stop release if safe to do so.

SAFETY DATA SHEET

Oxygen Free Nitrogen

Version 1.0

Revision Date: 28.09.2011



6.3. Methods and material for containment and cleaning up

Clean-up procedures: Gas, ventilate area.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling requirements: Prevent suck-back of water into the cylinder.
Do not allow feed-back into the cylinder.
Only use properly specified equipment which is rated at the pressure and temperature for this product. Contact your supplier if in doubt.
Refer to the suppliers cylinder handling instructions. (See appendix.)

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep cylinders below 50°C in a well ventilated place.

7.3. Specific end use(s)

Specific end use(s) No data available

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure controls

Personal protection: Ensure adequate ventilation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

State: Gas
Colour: Colourless gas
Odour: None
Molecular weight: 28
Melting point: -210°C
Boiling Point: -196°C
Critical temperature: -147°C
Vapour pressure: Not applicable.
Relative density (Air = 1): 0.97
Relative density (water = 1): Not applicable
Solubility in water: 20 mg/l

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Stable under normal conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reactions: None.

SAFETY DATA SHEET

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10.4. Conditions to avoid

Conditions to avoid: None

10.5. Incompatible material

Materials to avoid: None

10.6. Hazardous decomposition products

Hazardous decomposition products: None

SECTION 11: TOXICOLOGICAL INFORMATION

No known toxicological effects from this product.

SECTION 12. ECOLOGICAL INFORMATION

No known ecological damage caused by this product.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General: Do not discharge into any place where its accumulation could be dangerous.
Disposal of Produce: Vent to atmosphere in a well ventilated place.
Disposal of packaging: Return to supplier.
N.B.

SECTION 14. TRANSPORT INFORMATION

UN Number: UN1066
Labeling ADR, IMDG, IATA



2.2: Non flammable, non toxic gas.

14.1. ADR

Proper Shipping Name: NITROGEN, COMPRESSED
Class/Division: 2
Tunnel Code: (E)
Hazard Identification Number: 20
Labelling ADR: 2.2
Further Information Packing Instructions: P200.
Avoid transport on vehicles where 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 cylinders:
- Ensure that the cylinders are firmly secured.
- Ensure cylinder valves are closed and not leaking.
- Ensure outlet cap or plug (where provided) is correctly fitted
- Ensure valve protection device (where provided) is correctly fitted.
- Ensure there is adequate ventilation.
- Complies with applicable regulations.

14.2. IATA

Proper Shipping Name: NITROGEN, COMPRESSED
Class/Division: 2.2
Passenger and Cargo Aircraft
Packing Instruction: 200
Cargo only Aircraft

SAFETY DATA SHEET

Oxygen Free Nitrogen

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Packing Instruction: 200

14.3. IMDG

Proper Shipping Name: NITROGEN, COMPRESSED
Class/Division: 2.2
IMO Packing group: P200
EmS: F-C, S-V

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environment regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

No data available.

16. OTHER INFORMATION

Other information: Asphyxiant in high concentration.
Keep cylinders in a well ventilated place.
Do not breathe the gas.
The hazard of asphyxiation is often overlooked and must be stressed during operator training.
.
This safety sheet is prepared in accordance with Commission Regulation (EU) No. 453/2010.
* Indicates text in SDS which has changed since the last revision

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GENERAL SAFETY & HANDLING DATA

1. GENERAL

Only trained persons should handle compressed gases. Observe all regulations and local requirements regarding the storage of Cylinders. Do not remove or deface labels provided by the supplier for the identification of the Cylinder contents. Ascertain the identity of the gas before using it. Know and understand the properties and hazards associated with each gas before using it. When doubt exists as to the correct handling procedure for a particular gas contact the supplier.

HANDLING AND USE

Wear stout gloves.

Never lift a Cylinder by the cap or guard unless the supplier states it is designed for that purpose. Use trolley or other suitable device or technique for transporting heavy Cylinders, even for a short distance. Where necessary wear suitable eye and face protection. The choice between safety glasses, chemical goggles, or full face shield will depend on the pressure and nature of the gas being used,

Where necessary for toxic gases see that self-contained positive pressure breathing apparatus or full face airline respirator is available in the vicinity of the working area. Employ suitable pressure regulating device on all Cylinders when gas is being emitted to systems with lower pressure rating than that of the Cylinder. Ascertain that all electrical systems in the area are suitable for service with each gas.

Never use direct flame or electrical heating devices to raise the pressure of a Cylinder, Cylinders should not be subjected to temperatures above 45°C.

Never re-compress a gas mixture without consulting the supplier. Never attempt to transfer gases from one Cylinder to another.

Do not use Cylinders as rollers or supports, or for any other purpose other than to contain the gas as supplied. Never permit oil, grease or other readily combustible substances to come into contact with valves of Cylinders containing oxygen or other oxidants.

Keep Cylinder valves clean and free from contaminants particularly oil and water.

Do not subject Cylinders to mechanical shocks which may cause damage to their valves or safety devices.

Never attempt to repair or modify Cylinder valves or safety relief devices. Damaged valves should be reported immediately to the supplier.

Close the Cylinder valve whenever gas is not required even if the Cylinder is still connected to the equipment.

2. STORAGE

Cylinders should be stored in a well-ventilated area. Some gases will require a purpose built area. Store Cylinders in a location free from fire risk and away from sources of heat and ignition. Designate as a no smoking area.

Gas Cylinders should be segregated in the storage according to the various categories.

The storage area should be kept clear and access should be restricted to authorized persons only, the area should be clearly marked as a storage area and appropriate hazard warning signs displayed (Flammable, Toxic etc.).

The amount of flammable or toxic gases should be kept to a minimum.

Flammable gases should be stored away from other combustible materials.

Cylinders held in storage should be periodically checked for general condition and leakage.

Cylinders in storage should be properly secured to prevent toppling or rolling.

Vertical storage is recommended where the Cylinder is designed for this.

Cylinder valves should be tightly closed and, where appropriate, valves should be capped or plugged. Protect Cylinders stored in the open against rusting and extremes of weather.

Cylinders should not be stored in conditions likely to encourage corrosion.

Store full and empty Cylinders separately and arrange full Cylinders so that the oldest stock is used first.

FOR FURTHER INFORMATION CONTACT YOUR NEAREST DISTRIBUTION CENTRE