

Nitrogen (Oxygen Free)

PRODUCT: NITROGEN MSDS NR: 300-00-0023 BOC VERSION: 1.04 DATE: 28/09/06

1 IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY

Product name	Nitrogen (Oxygen Free)
Chemical formula	N ₂
Company identification	See end of page 2.
Emergency phone Nos	See end of page 2.

2 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/ Preparation	Substance
Components/ Impurities	Contains no other components or impurities which will influence the classification of the product.
CAS Nr	7727-37-9
EEC Nr (from EINECS)	231-783-9
Specification	
Nitrogen (Oxygen Free)	99.998% minimum (Specification includes argon) Conforms to BS4366

3 HAZARDS IDENTIFICATION

Compressed gas.
In high concentrations may cause asphyxiation.

4 FIRST AID MEASURES

Inhalation	In high concentrations may cause asphyxiation and death. 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.

5 FIRE FIGHTING MEASURES

Specific hazards	Exposure to fire may cause containers to rupture/explode. Inform Fire Brigade. Non flammable.
Hazardous combustion products	None.
Suitable extinguishing media	All known extinguishants can be used.
Specific methods	If possible, stop flow of product. Move away from container and cool with water from a protected position.
Special protective equipment for fire fighters	In confined space use self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

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

7 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. Contact BOC if in doubt. Refer to BOC container handling instructions. Keep container below 50°C in a well ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection	Ensure adequate ventilation.
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9 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
Solubility mg/l water	20 mg/l
Appearance/Colour	Colourless gas
Odour	No odour warning properties

10 STABILITY AND REACTIVITY

Stability and reactivity	Stable under normal conditions.
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11 TOXICOLOGICAL INFORMATION

General	No known toxicological effects from this product.
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12 ECOLOGICAL INFORMATION

General	No ecological damage caused by this product
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**SAFETY
DATA
SHEET**

13 DISPOSAL CONSIDERATIONS

General Do not discharge into any place where its accumulation could be dangerous. To atmosphere in a well ventilated place. Contact BOC if guidance is required.

14 TRANSPORT INFORMATION

Proper Shipping Name Nitrogen, Compressed
UN Nr 1066
Class/Div 2.2
ADR/RID Classification Code 1A
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 provided) is correctly fitted.
 - valve protection device (where provided) is correctly fitted
 - adequate ventilation.
 - compliance with applicable regulations.

15 REGULATORY INFORMATION

Number in Annex I of Dir 67/548 Not included in Annex I.
EC Classification Not classified as dangerous substance.
Labelling of cylinders - Symbols Label 2.2: non flammable non toxic gas.

16 OTHER INFORMATION

Ensure all national/local regulations are observed.
 Asphyxiant in high concentrations.
 Keep container in well ventilated place.
 Do not breathe the gas.
 The hazard of asphyxiation is often overlooked and must be stressed during operator training. Users of breathing apparatus must be trained.
 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.
 Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Do not use any other gas as a substitute for nitrogen.
 Always leak check cylinders when first collected, delivered or used, using an approved leak detection fluid.
 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.
 For further safety information please refer to "Safety Under Pressure" and "Guidance for carriage of gas cylinders on vehicles", both of which are available from your local BOC outlet.

CYLINDER CHARACTERISTICS

Cylinder size	Max Fill Pressure at 15°C Bar	Approx. Dimensions incl. valve and guard where supplied (mm)	Approx. Gross Cylinder weight (kg)	Manifolded Cylinder Pallets (MCP)	Max Fill Pressure at 15°C Bar	Approx. Dimensions incl. valve and guard where supplied (mm)	Approx. Gross Cylinder Weight (kg)
X	230	940 x 140	19	WW (15 x W)	230	1290 x 1810 x 840	1500
Y	230	930 x 203	40	WZ (15 x Z)†	300	1290 x 1810 x 840	1800
W	230	1460 x 230	85	*QW (12 x W)	230	2000 x 1035 x 850	1500
Z†	300	1640 x 230	77	*ZW (20 x W)	230	2080 x 1330 x 1090	2300
				*YW (16 x W)	230	2080 x 1120 x 1120	1950

*Offshore only products.

†Outlet connection: NEVOC Type 30 @ 300Bar

•Outlet connection: 5/8" BSP female right hand cone recessed



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All BOC Safety Data Sheets are available online at www.boc.com/uk/sds

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