

SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006


INTERNATIONAL

HARP[®] Nitrogen

Version: CLP01

Date: Oct 2011

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1. Identification of the substance / preparation and company / undertaking

Product name	Nitrogen, compressed
Chemical formula	N ₂
REACH registration number	Exempt (Annex IV/V of Regulation (EC) No.1907/2006)
Company	Harp International Ltd Gellihirion Industrial Estate Pontypridd Rhondda Cynon Taff CF37 5SX Tel: +44 (0) 1443 842255 Fax: +44 (0) 1443 841805 Email: harp@harpintl.com
Emergency phone number	+44 (0) 1270 502891 (24 hour)
Use	Industrial

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008/EC (CLP/GHS)

Press. Gas (Compressed gas) – Contains gas under pressure; may explode if heated.

Classification according to Directive 67/548/EEC & 1999/45/EC

Not classified as hazardous to health. Asphyxiant in high concentrations.

Risk advice to man and the environment

In high concentrations may cause asphyxiation. Compressed gas.

Label elements

Labelling Pictograms



Signal word

Warning

Hazard statements

H280

EIGA-As

Contains gas under pressure; may explode if heated

Asphyxiant in high concentrations

Precautionary statements

Precautionary statement prevention

None

Precautionary statement response

None

Precautionary statement storage

P403

Store in a well-ventilated place

Precautionary statement disposal

None

Other hazards

None

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3. Composition / information on ingredients

Substance / mixture: Substance

CAS number 7727-37-9

EC No (from EINECS) 231-783-9

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

4. First aid measures

Description of first aid measures

General advice Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Inhalation Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Skin contact Adverse effects not expected from this product

Eye contact Adverse effects not expected from this product

Ingestion Ingestion is not considered a potential route of exposure

Most important symptoms and effects, both acute and delayed

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility / consciousness. Victim may not be aware of asphyxiation.

Indication of any immediate medical attention and special treatment needed

None

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media All known extinguishants can be used.

Special hazards arising from the substance or mixture

Specific hazards Exposure to fire may cause containers to rupture or explode.

Hazardous combustion products None

Advice for fire fighters

Specific methods If possible, stop flow of product. Move container away or cool with water from a protected position.

Special protective equipment In confined space use self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

Environmental precautions

Try to stop release.

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Methods and materials for containment and cleaning up

Ventilate area.

Reference to other sections

See also sections 8 and 13.

7. Handling and storage

Precautions for safe handling

Suck back of water into the container must be prevented. Do not allow feedback into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Refer to suppliers handling instructions. Only experienced and properly instructed persons should handle gases under pressure. Protect cylinders from physical damage; do not drag, roll, slide or drop. Never use direct flame or electrical heating devices to raise the pressure of the container. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents. When moving cylinders, even for short distances, use a cart (trolley, hand truck etc.) designed to transport cylinders. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Ensure the complete gas system has been (or is regularly) checked for leaks before use. If user experiences any difficulty operating cylinder valve discontinue use and contact cylinder supplier. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment. Keep container valve outlets clean and free from contaminants, particularly oil and water. Never attempt to transfer gases from one cylinder/container to another. Do not smoke while handling product. The substance must be handled in accordance with good industrial hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities

Keep container below 50°C in a well-ventilated place. Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent falling over. Stored containers should be periodically checked for general conditions and leakage. Container valve guards or caps should be in place. Store containers in a location free from fire risk and away from sources of heat and ignition. Keep away from ignition sources (including static discharges). Keep away from combustible materials.

Specific end uses

None

8. Exposure controls / personal protection

Control parameters

Exposure controls

No occupational exposure limit.

Exposure controls

Appropriate engineering controls

Product to be handled in a closed system. The substance must be handled in accordance with good industrial hygiene and safety procedures. Consider work permit system e.g. for maintenance activities. Systems under pressure should be regularly checked for leaks. Provide adequate general or local ventilation. Oxygen detectors should be used when asphyxiating gases may be released.

Personal protective equipment

Eye and face protection

Wear eye protection to EN166 when using gases.

Skin and hand protection

Wear leather safety gloves when handling cylinders.

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Other protection

Wear safety shoes when handling cylinders.

Respiratory protection

Not required.

Thermal hazards

Not required

Environmental Exposure Controls

Specific risk management measures are not required beyond good industrial hygiene and safety procedures. Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

9. Physical and chemical properties

Appearance/colour	Colourless gas
Odour	None
Melting point	-210°C
Boiling point	-196°C
Flash point	Not applicable for gases and gas mixtures
Flammability range	Non flammable
Vapour pressure 20°C	Not applicable
Relative density, gas	0,97
Solubility in water	20 mg/l
Auto-ignition temperature	Not applicable
Explosive properties	Explosive acc. EU legislation: Not explosive Explosive acc. transport regulations: Not explosive
Oxidising properties	Not applicable
Molecular weight	28 g/mol
Critical temperature	-147°C
Relative density, liquid	0,8
Other information	None

10. Stability and reactivity

Reactivity	Unreactive under normal conditions
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	None
Conditions to avoid	None
Incompatible materials	No reaction with any common materials in dry or wet conditions
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects	No known toxicological effects from this product
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12. Ecological information

Toxicity	No ecological damage caused by this product
Persistence and degradability	The substance is naturally occurring
Bioaccumulative potential	Not applicable
Mobility in soil	The substance is a gas. Not applicable.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB
Other adverse effects	Not applicable

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13. Disposal considerations

Waste treatment methods

Do not discharge into any place where its accumulation could be dangerous. Vent to atmosphere in a well-ventilated place. Contact supplier if guidance is required.

EWC No. 16 05 05

14. Transport information

ADR/RID

Class	2
Classification code	1A
UN number	1066
Labelling no	2.2
Proper shipping name	NITROGEN, COMPRESSED
Packing group	P200
Hazard number	20
Emergency Action Code	2T
Tunnel restriction code	(D/E)
Environmental hazards	None
Special precautions for user	None

IATA

Class	2.2
UN number	1066
Labelling number	2.2
Proper shipping name	NITROGEN, COMPRESSED
Packing group	P200
Environmental hazards	None
Special precautions for user	None

IMDG

Class	2.2
UN number	1066
Labelling no.	2.2
Proper shipping name	NITROGEN, COMPRESSED
Packing group	P200
EmS	FC, SV,
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code
Not applicable

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 emergency. Before transporting product containers ensure that they are firmly secured. Ensure that the cylinder valve is closed and not leaking. Ensure that the valve outlet cap nut or plug (where provided) is correctly fitted. Ensure that the valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

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15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Directive 96/82/EC: Not covered

Chemical Safety Assessment

A Chemical Safety Assessment does not need to be carried out for this substance.

16. Other information

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.

Note

When using this document care should be taken as the decimal sign and its position complies with rules for the structure and drafting of international standards and is a comma on the line. As an example 2,000 is two (to three decimal places) and not two thousand, whilst 1.000 is one thousand and not one (to three decimal places).

This datasheet was prepared in accordance with Regulation (EC) No. 1907/2006.

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