

Safety Data Sheet

Product :

Helium

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MSDS Nr : 300-00-0015BOC(A)

Version : 1.04

Date : 18/12/2003

Replaces version dated : 29/07/1994

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name	Helium
Chemical formula	He
Company identification	see heading and/or footer
Emergency phone numbers	see heading and/or footer

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	7440-59-7
EC Nr (from EINECS)	231-168-5

3 HAZARDS IDENTIFICATION

Hazards identification	Compressed gas In high concentrations may cause asphyxiation. Not classified as dangerous substance.
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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 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. 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 the container and cool with water from a protected position.
Special protective equipment for fire fighters	In confined space use self-contained breathing apparatus.

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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.
Environmental precautions	Try to stop release.
Clean up methods	Ventilate area.

7 HANDLING AND STORAGE

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 your gas supplier if in doubt. Refer to supplier's container handling instructions. Keep container below 50°C in a well ventilated place.
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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection	Ensure adequate ventilation.
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9 PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight	4
Melting point	Not applicable
Boiling point	-269 °C
Critical temperature	-268 °C
Relative density, gas	0.14 (air=1)
Relative density, liquid	Not applicable.
Vapour Pressure 20°C	Not applicable.
Solubility mg/l water	1.5 mg/l
Appearance/Colour	Colourless gas
Odour	None

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.

12 ECOLOGICAL INFORMATION

General

No known ecological damage caused by this product.

13 DISPOSAL CONSIDERATIONS

General

To atmosphere in a well ventilated place.

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

Contact supplier if guidance is required.

14 TRANSPORT INFORMATION

Proper shipping name

HELIUM, COMPRESSED

UN Nr

1046

Class

2.2

ADR/RID Classification code

1A

ADR/RID Hazard Nr

20

Packing group

None

Labelling ADR

Label 2.2: non flammable non toxic gas

IMDG EmS codes

F-C, S-V

IMDG Marine pollutant

No

IATA passenger packing instruction

200

IATA passenger max. quantity/pack

75kg

IATA cargo packing instruction

200

IATA cargo max. quantity/pack

150kg

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

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- there is 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 preparation.

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.

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.

End of document.

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