

Safety data sheet Helium, compressed.

Creation date : 27.01.2005
Revision date : 04.01.2011

Version : 2.0

DE / E

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1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name

Helium, compressed.
EC No (from EINECS): 231-168-5
CAS No: 7440-59-7
Index-Nr. -

Chemical formula He

REACH Registration number:

Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.

Known uses

Not known.

Company identification

Linde AG, Linde Gas Division, Seitnerstraße 70, D-82049 Pullach
E-Mail Address Info@de.linde-gas.com
Emergency phone numbers (24h): 089-7446-0

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

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

Classification acc. 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 Contains gas under pressure; may explode if heated.
EIGA-As Asphyxiant in high concentrations.

- Precautionary Statements

Precautionary Statement Prevention

None.

Precautionary Statement Reaction

None.

Precautionary Statement Storage

P403 Store in a well-ventilated place.

Precautionary Statement Disposal

None.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation: Substance.

Components/Impurities

Helium, compressed.

CAS No: 7440-59-7

Index-Nr.: -

EC No (from EINECS): 231-168-5

REACH Registration number:

Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.

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

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 container away or 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.

Environmental precautions

Try to stop release.

Clean up methods

Ventilate area.

7 HANDLING AND STORAGE

Handling

Suck back of water into the container must be prevented. 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 handling instructions. Do not allow backfeed into the container. 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 a 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

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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 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.

Storage

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 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. Observe "Technische Regeln Druckgase (TRG) 280 Ziffer 5"

8 EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protection**

Ensure adequate ventilation.

9 PHYSICAL AND CHEMICAL PROPERTIES**General information**

Appearance/Colour: Colourless gas.

Odour: None.

Important information on environment, health and safety

Molecular weight: 4 g/mol

Melting point: -272,2 °C

Boiling point: -269 °C

Critical temperature: -268 °C

Autoignition temperature: Not applicable.

Flammability range: Not applicable.

Relative density, gas: 0,14

Relative density, liquid: 0,12

Solubility mg/l water: 1,5 mg/l

Maximum filling pressure (bar): 300 bar

Other data

None.

10 STABILITY AND REACTIVITY**Stability and reactivity**

Stable under normal conditions.

Hazardous decomposition products**Statements on decomposition**

None.

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**

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

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14 TRANSPORT INFORMATION**ADR/RID**

Class	2	Classification Code	1A
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UN number and proper shipping name

UN 1046 Helium, compressed

UN 1046 Helium, compressed

Labels	2.2	Hazard number	20
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Packing Instruction	P200
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IMDG

Class	2.2
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UN number and proper shipping name

UN 1046 Helium, compressed

Labels 2.2

Packing Instruction P200

EmS FC, SV

IATA

Class	2.2
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UN number and proper shipping name

UN 1046 Helium, compressed

Labels 2.2

Packing Instruction P200

15 REGULATORY INFORMATION**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.

Advice

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. Details given in this document are believed to be correct at the time of going to press.

Further information

Linde safety advice

No. 3 Oxygen deficiency

No. 7 Safe handling of gas cylinders and cylinder bundles

No. 11 Transport of gas receptacles in vehicles

End of document