SAFETY DATA SHEET

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Revised edition no : 0

Date : 7 / 30 / 2010

Supersedes: 0 / 0 / 0

Helium

SDB 1 1 040



Warning



1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name : Helium

SDS Nr : SDB 1 1 040

Chemical description : Helium

CAS No :007440-59-7 EC No :231-168-5 Index No :---

Chemical formula : He

Registration-No. : Listed in Annex IV / V REACH, exempted from registration.

Use : Industrial and professional. Perform risk assessment prior to use.

Company identification : Kraiss & Friz KG Neckarstrasse 182

> 70190 Stuttgart GERMANY Tel: 00 49 711 285 340 Fax: 00 49 711 26 04 77

> e-Mail: info@kraissundfriz.de

Emergency telephone number : 00 49 172 740 2115

2 Hazards identification

Classification of the substance or mixture

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

• Physical hazards : Gases under pressure - Compressed gas - Warning (H280)

Classification EC 67/548 or EC 1999/ : Not included in Annex VI.

45 Not classified as dangerous preparation/substance.

No EC labelling required.

Label elements

Labelling Regulation EC 1272/2008 (CLP)

· Hazard pictograms



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2 Hazards identification (continued)

· Hazard pictograms code

 Signal word : Warning

: H280 : Contains gas under pressure; may explode if heated. Hazard statements

· Precautionary statements

- Storage : P403 : Store in a well-ventilated place.

Labelling EC 67/548 or EC 1999/45

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

Other hazards

Other hazards : Asphyxiant in high concentrations.

3 Composition/information on ingredients

Substance / Preparation : Substance.

| Substance name | | Contents | CAS No | EC No | Index No | Registration no | Classification |
|----------------|---|----------|-----------|-----------|----------|-----------------|-------------------|
| Helium | : | 100 % | 7440-59-7 | 231-168-5 | | NOTE 1 | |
| | | | | | | | Press. Gas (H280) |

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. Full text of R-phrases see chapter 16

4 First aid measures

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 is not considered a potential route of exposure. - Ingestion

5 Fire-fighting measures

: Exposure to fire may cause containers to rupture/explode. Specific hazards

Hazardous combustion products

Extinguishing media

: None.

- Suitable extinguishing media

: All known extinguishants can be used. : If possible, stop flow of product.

Specific methods

Move away from the container and cool with water from a protected position.

fighters

Special protective equipment for fire : 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.

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6 Accidental release measures (continued)

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

7 Handling and storage

Storage

Handling : 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.

8 Exposure controls/personal protection

Personal protection : Ensure adequate ventilation.

9 Physical and chemical properties

Physical state at 20 ℃ : Gas.

Colour : Colourless.

Odour : No odour warning properties.

Molecular weight : 4

Melting point [°C] : Not applicable.

Boiling point [$^{\circ}$ C] : -269 Critical temperature [$^{\circ}$ C] : -268

Vapour pressure [20°C] : Not applicable.

Relative density, gas (air=1) : 0.14

Relative density, liquid (water=1) : Not applicable.

Solubility in water [mg/l] : 1.5

Flammability range [vol% in air] : Non flammable.

10 Stability and reactivity

Hazardous decomposition products : None.

Chemical stability : Stable under normal conditions.

11 Toxicological information

Toxicity information : No known toxicological effects from this product.

12 Ecological information

Ecological effects information: No known ecological damage caused by this product.

13 Disposal considerations

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

To atmosphere in a well ventilated place. Contact supplier if guidance is required.

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14 Transport information

UN number : 1046

· Labelling ADR, IMDG, IATA



: 2.2 : Non flammable, non toxic gas.

Land transport

ADR/RID

H.I. nr : 20

UN proper shipping name : HELIUM, COMPRESSED

Transport hazard class(es) : 2
- ADR/RID Classification code : 1 A
- Packing Instruction(s) - General : P200

- Tunnel Restriction : E : Passage forbidden through tunnels of category E.

Sea transport

- IMO-IMDG code

• Proper shipping name : HELIUM, COMPRESSED

Class : 2.2
 IMO Packing group : P200
 Emergency Schedule (EmS) - Fire : F-C
 Emergency Schedule (EmS) - : S-V

Spillage

- Instructions - Packing : P200

Air transport

- ICAO/IATA

- Proper shipping name : HELIUM, COMPRESSED

Class : 2.2
 Passenger and Cargo Aircraft : Allowed.
 Packing instruction : 200
 Cargo Aircraft only : Allowed.
 Packing instruction : 200

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 containers are firmly secured.
- Ensure cylinder valve is closed and not leaking.
- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
- Ensure valve protection device (where provided) is correctly fitted.
- Ensure there is adequate ventilation.
- Compliance with applicable regulations.

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15 Regulatory information

Safety, health and environmental regulations/legislation specific for the

substance or mixture

Seveso regulation 96/82/EC

: Ensure all national/local regulations are observed.

: Not covered.

16 Other information

Asphyxiant in high concentrations.

Keep container 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 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.

DISCLAIMER OF LIABILITY

: 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. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

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