

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

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

1.1 Product identifier

Trade name/designation Helium (type test leak)
EC No. 231-168-5
CAS No. 7440-59-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture
test gas

1.3 Details of the supplier of the safety data sheet

Supplier

INFICON GmbH
Bonner Straße 498
D-50968 Köln
Telephone +49(0)221- 56788-0
Telefax: +49(0)221- 56788-90
E-mail leakdetection@inficon.com

Department responsible for information:
Entwicklung / Konstruktion (RESEARCH / DESIGN)
Telephone +49(0)221- 56788-354
Website www.inficon.com

1.4 Emergency telephone number

Giftinformationszentrale Bonn +49(0)228 - 19 240
(Advice in German and English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Press. Gas (Comp.), H280	

hazard statements for physical hazards

H280 Contains gas under pressure; may explode if heated.

Hazard pictograms



GHS04

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word

Warning

Hazard statements

H280 Contains gas under pressure; may explode if heated.

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

Precautionary statements

P102 Keep out of reach of children.
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

2.3 Other hazards

Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances

Substance name	Helium
EC No.	231-168-5
CAS No.	7440-59-7

3.2 Mixtures

not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

Following inhalation

Remove casualty to fresh air and keep warm and at rest.
In high concentrations may cause asphyxiation.
Remove aggrieved persons from danger zone
In the event of symptoms refer for medical treatment.
If breathing is irregular or stopped, administer artificial respiration.

Following skin contact

not relevant

After eye contact

not relevant

Following ingestion

Ingestion is not considered a possible route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

Dyspnoea

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

Treat symptomatically.

Helium (type test leak)

Print date 09.05.2022
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Version 3.0 (en)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Product itself does not burn, adjust fire extinguishing measures to the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Exposure to fire may cause containers to rupture / explode.

5.3 Advice for firefighters

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.
Use protective equipment.

Additional information

Heat action leads to pressure increase - risk of bursting
If possible stop gas leakage
Do not inhale explosion and combustion gases.
Remove the endangered containers or spray them with cold water

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid skin and eye contact
Use personal protection equipment.

For emergency responders

Personal protection equipment
Ensure adequate ventilation.
Remove persons to safety.
Keep away unprotected persons.

6.2 Environmental precautions

Prevent further leakage or spilling if this can be done safely.

6.3 Methods and material for containment and cleaning up

For cleaning up

Provide adequate ventilation.
Leave to vapourize.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

7.1 Precautions for safe handling

Protective measures

Product is not inflammable
Use only in well-ventilated areas.
Do not inhale gases.
Ein Ventilschutzring sollte vorhanden sein oder die Ventilschutzkappe angebracht werden.
Take the usual precautions when handling with chemicals.

Advices on general occupational hygiene

When using do not eat, drink, smoke.
Remove contaminated, saturated clothing immediately.
Work in rooms with good ventilation.
Wash hands before breaks and after work.
Please observe work hygiene regulations.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.
Keep container tightly closed.
Protect from moisture, heat and direct sunlight.
Avoid heating to over 50 °C.
Ein Ventilschutzring sollte vorhanden sein oder die Ventilschutzkappe angebracht werden.

Storage class

2A Gases (except aerosol dispensers and lighters)

Further information on storage conditions

Keep away from foods and beverages.

7.3 Specific end use(s)

Recommendation

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No data available

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

For good space ventilation provide, if necessary exhaust on the job.
Sufficient ventilation and exhaustion.

Personal protection equipment

Eye/face protection

Safety goggles (DIN EN 166)

Hand protection

Protective gloves (DIN EN 388)

cold resistant

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

The selection of a suitable glove depends from manufacturer to manufacturer not only on the material, but also on further quality criteria.

Helium (type test leak)

Print date 09.05.2022
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Body protection:

Protective clothing

Respiratory protection

Respiratory protection necessary at:
insufficient ventilation
insufficient exhaust
prolonged exposure
high concentrations
Suitable respiratory protection apparatus:
Container device with compressed air (EN 137)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state

compressed gas

Colour

colourless

Odour

odourless

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
Melting point/freezing point	Melting point -272.15 °C		
Boiling point or initial boiling point and boiling range	-269 °C		
flammability	not determined		
Lower and upper explosion limit	not determined		
Flash point	not determined		
Auto-ignition temperature	not determined		
Decomposition temperature	not determined		
pH	not determined		
Viscosity	dynamic 0.025 mPa*s		
Solubility(ies)	Water solubility 2.5 mg/L (21°C)		
Partition coefficient n-octanol/water (log value)	not determined		
Vapour pressure	not determined		
Density and/or relative density	Relative density 0.138 (0°C)		
Relative vapour density	not determined		
particle characteristics	not determined		

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

9.2 Other information

Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is considered non-reactive under normal conditions of use.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

strong heating

10.5 Incompatible materials

None if used as intended.
Keep away from food and drink.

10.6 Hazardous decomposition products

No risk of production of decomposition products when appropriately handled and stored.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	not determined		
Acute dermal toxicity	not determined		
Acute inhalation toxicity	not determined		

Assessment/classification

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Assessment/classification

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Assessment/classification

Based on available data, the classification criteria are not met.

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

Sensitisation to the respiratory tract

Assessment/classification

Based on available data, the classification criteria are not met.

Skin sensitisation

Assessment/classification

Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment/classification

No data available

Overall Assessment on CMR properties

Based on available data, the classification criteria are not met.

STOT-single exposure

STOT SE 1 and 2

Assessment/classification

Based on available data, the classification criteria are not met.

STOT SE 3

Irritation to respiratory tract

Assessment/classification

Based on available data, the classification criteria are not met.

Narcotic effects

Assessment/classification

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Assessment/classification

Based on available data, the classification criteria are not met.

Aspiration hazard

Assessment/classification

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

No data available

Other information

Toxic effects of this gas are unknown. However, release of larger quantities may result in unconsciousness or death due to oxygen displacement from the atmosphere.
Refrigerated liquefied gas. Contact with the product can cause cold burns or frostbite.
Other hazardous properties may not be excluded.
The product is to be handled with the caution usual with chemicals.

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Revision date 09.05.2022
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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	not determined		
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	not determined		
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

Assessment/classification

No special environmental measures are necessary.

12.2 Persistence and degradability

Assessment/classification

not persistent.

12.3 Bioaccumulative potential

Assessment/classification

No indication of bioaccumulation potential.

12.4 Mobility in soil

Assessment/classification

No adsorption in soil or sediment.

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Endocrine disrupting properties

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties		Based on available data, the classification criteria are not met.	

12.7 Other adverse effects

Additional ecotoxicological information

Additional information

No risk of ecological problems if properly handled and used

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 Version 3.0 (en)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product	Waste name
150104	metallic packaging
160505	gases in pressure containers other than those mentioned in 16 05 04

Waste code packaging	Waste name
150104	metallic packaging

Appropriate disposal / Product

Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Disposal in accordance with local regulations.

Remark

The waste code must be allocated in compliance with the EAK-regulation referring to the specific process and the sector.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	2037	2037	2037
14.2 UN proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS	RECEPTACLES, SMALL, CONTAINING GAS	Receptacles, small, containing gas
14.3 Transport hazard class(es)	2	2.2	2.2
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

not applicable

All transport carriers

Ensure sufficient ventilation, adhere to applicable regulations.
 24h EMERGENCY CONTACT (TRANSPORT) +49(0)178 433 7434 (Consultank Lutz Harder GmbH)

Land transport (ADR/RID)

UN number or ID number	2037
UN proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS
Transport hazard class(es)	2
Hazard label(s)	2.2
Classification code:	5A
Packing group	-
Environmental hazards	No
Limited quantity (LQ)	1 L

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Print date 09.05.2022
Revision date 09.05.2022
Version 3.0 (en)

Special Provisions 191 303 327 344
tunnel restriction code E

Remark

According to ADR no dangerous goods by application of special provision 191

Sea transport (IMDG)

UN number or ID number 2037
UN proper shipping name RECEPTACLES, SMALL, CONTAINING GAS
Transport hazard class(es) 2.2
Packing group -
Environmental hazards No
Limited quantity (LQ) 1 L
Marine pollutant No
EMS F-D, S-U

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number 2037
UN proper shipping name Receptacles, small, containing gas
Transport hazard class(es) 2.2
Packing group -
Environmental hazards No

SECTION 15: Regulatory information

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

Other regulations (EU)

To follow:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.2 Chemical Safety Assessment

National regulations

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

See overview table at www.euphrac.eu

Key literature references and sources for data

Data sheets of the sub-supplier.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The product is to be produced on the basis of the available hazard data of the ingredients, as defined in the classification criteria for mixtures for each hazard class in Annex I to Regulation (EC) No 1272/2008, classified.

Helium (type test leak)

Print date 09.05.2022
Revision date 09.05.2022
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Additional information

National and local regulations concerning chemicals shall be observed.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Relevant H- and EUH-phrases (Number and full text)

H280 Contains gas under pressure; may explode if heated.