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Helium 99.999% - Water 0.001%		MTGxxx

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

1.1. Product identifier

Trade name	1 component in Helium
Chemical description	Helium 99.999% - Water 0.001%
CAS N°	-
CE N°	-
Index N°	-
Registration n°	-
Chemical formula	He, H ₂ O

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

Relevant identified uses	Industrial and professional Calibration and quality control Laboratory use Food applications Contact supplier for more information on uses
Uses advised against	For use by industrial or professional users only

1.3. Details of the supplier of the safety data sheet

Company identification	MULTIGAS Route de l'Industrie 102 CH-1564 Domdidier
Phone number	+41 (0) 26 676 94 94
E-mail address	info@multigas.ch

1.4. Emergency telephone numbers

145 (Toxicology Centre Zurich) or +41 (0) 44 251 51 51
 +41 (0) 26 676 94 94 (Multigas)

SECTION 2: Hazards identification


2.1. Classification of the substance or mixture

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

Gases under pressure : Compressed gas

H280

For the complete H-sentences texts mentioned in that chapter, refer to Section 16

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2.2. Label elements

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

Hazard pictograms



GHS04

Signal word

Warning

Hazard statements

H280

Contains gas under pressure; may explode if heated

Precautionary statements

P410+P403

Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

Asphyxiant in high concentrations

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	Concentration	Classification
Helium	(CAS-No.) 7440-59-7 (EC-No.) 231-168-5 (EC Index-No.) --- (Registration-No.)--	99.999%	Press. Gas (Comp.), H280
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2 (EC Index-No.) --- (Registration-No.)--	0.001%	Uncategorized

For the complete H-sentences texts mentioned in that chapter, refer to Section 16

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

3.2. Mixtures

Not established

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

See a doctor. Show this safety data sheet to the attending physician

Helium 99.999% - Water 0.001%**MTGxxx****In case of inhalation**

In case of inhalation, remove the person from the contaminated area. In case of respiratory arrest, give artificial respiration. See a doctor

In case of skin contact

Adverse effects not expected from this product

In case of eyes contact

Adverse effects not expected from this product

In case of ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. See a doctor

4.2. 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
Refer to section 11

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

The product itself does not burn
Water spray or water mist. Dry powder. Carbon dioxide. Foam

Unsuitable extinguishing media

Do not use water jet to extinguish

5.2. Special hazards arising from the substance or mixture**Specific hazards**

Exposure to fire may cause containers to rupture/explode

Hazardous combustion products

No data available

5.3. Additional information

Cool endangered receptacles with water spray jet from a protected position

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapours, spray mists or gases
Provide adequate ventilation
Evacuate personnel to a safe place
Personal protective equipment, see section 8

6.2. Environmental precautions

-

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6.3. Methods and material for containment and cleaning up

-

6.4. Reference to other sections

See also sections 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For precautions, see section 2.2

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place

Content under pressure

7.3. Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits


Component	CAS N°	Exposure value type	Control parameter	Source
Helium	7440-59-7	TWA	-	No occupational exposure limit value
			-	
		OEL	-	
			-	
Water	7732-18-5	TWA	-	No occupational exposure limit value
			-	
		OEL	-	
			-	

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation

Gas detectors should be used when toxic gases may be released

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8.2.2. Individual protection measures, e.g. personal protective equipment

Eye/face protection	Wear goggles and a face shield when transfilling or breaking transfer connections. Standard EN 166 - Personal eye-protection
Skin / hand protection	Wear protective gloves when handling gas cylinders. Standard EN 388- Protective gloves against mechanical hazards
Respiratory protection	Self-contained breathing apparatus (SCBA) or positive pressure air mask must be used in oxygenated atmospheres. Standard EN 137 - Self-contained compressed air device with a full face mask

8.2.3. Environmental exposure controls

-

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

• Physical state at 20°C / 101.3kPa	Gas
• Colour	Colourless
Odour	Odourless
Odour threshold	No data available
pH	No data available
Melting point / Freezing point	No data available
Boiling point	-269°C (He) It is not technically possible to determine the boiling point or boiling range of this mixture
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Non-flammable
Explosive limits	No data available
Vapour pressure [20°C]	No data available
Vapour pressure [50°C]	No data available
Vapour density	No data available
Relative density, liquid (water=1)	No data available
Relative density, gas (air=1)	No data available
Water solubility	Poorly soluble
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

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Explosive properties No data available

Oxidising properties No data available

9.2. Other information

Molar mass ~4 mg/l

Critical temperature [°C] No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Avoid moisture in installations

10.5. Incompatible materials

For more information on compatibility, please refer to ISO 11114

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Chemical safety assessment

Acute toxicity No toxicological effects expected with this product if exposure limit values are not exceeded.

Skin corrosion/irritation No known effect with this product

Serious eye damage/irritation No known effect with this product

Respiratory or skin sensitisation No known effect with this product

Germ cell mutagenicity No known effect with this product

Carcinogenicity No known effect with this product

Reproductive toxicity No known effect with this product

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STOT-single exposure – Target organ(s)	No known effect with this product
STOT-repeated exposure	No known effect with this product
Ingestion hazard	Not applicable to gases and gas mixtures

11.2 Information on other hazards

Other information	The substance/mixture does not have endocrine disrupting properties
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SECTION 12: Ecological information

12.1. Toxicity

Assessment	This product is ecologically safe
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12.2. Persistence and degradability

This product is ecologically safe

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

This product is ecologically safe

12.5. Results of PBT and vPvB assessment

PBT / vPvB assessment is not available because the chemical safety assessment is not required / is not conducted

12.6. Endocrine-disrupting properties

The substance/mixture does not have endocrine disrupting properties

12.7. Other adverse effects

Other adverse effects	No known effect with this product
Effect on the ozone layer	No effect on the ozone layer

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	May be vented to atmosphere in a well ventilated place Do not discharge into any place where its accumulation could be dangerous
Contaminated container	Return surplus and non-recyclable solutions to a licensed waste disposal company

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Contact the supplier if instructions are needed

OMoD Code

16 05 05

Gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transport information

14.1. UN number

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
1956	1956	1956

14.2. UN proper shipping name

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
COMPRESSED GAS, N.O.S. (HELIUM)	COMPRESSED GAS, N.O.S. (HELIUM)	COMPRESSED GAS, N.O.S. (HELIUM)

14.3. Transport hazard class(es)

Labelling



ADR/RID
 IMDG
 IATA

2.2 : Non-flammable, non-toxic gases

14.4. Packing group

ADR/RID
 IMDG
 IATA

Not established

14.5. Environmental hazards

ADR/RID

None

IMDG

None

ICAO-TI / IATA-DGR


None

14.6. Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of Regulation (CE) No. 1907/2006

15.2. Chemical safety assessment

A CSA does not need to be carried out for this product


SECTION 16: Other information

Indication of changes	Revised safety data sheet in accordance with commission regulation (EU) No 2015/830
Abbreviations and acronyms	<p>ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>CAS : Chemical Abstract Service number (USA)</p> <p>CLP : Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</p> <p>CSA : Chemical Safety Assessment</p> <p>EIGA : European Industrial Gases Association</p> <p>EINECS : European Inventory of Existing Commercial Chemical Substances</p> <p>EN : European Standard</p> <p>ATE : Acute Toxicity Estimate</p> <p>IATA : International Air Transport Association</p> <p>IMDG Code : International Maritime Dangerous Goods Code</p> <p>LC50 : Lethal Concentration to 50 % of a test population</p> <p>OMoD : Swiss Ordinance on the movement of waste</p> <p>PBT : Persistent, Bioaccumulative and Toxic</p> <p>PPE: Personal Protection Equipment</p> <p>REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006</p> <p>RID : Regulations concerning the international carriage of dangerous goods by rail</p> <p>RMM : Risk Management Measures</p> <p>STOT-SE : Specific Target Organ Toxicity - Single Exposure</p> <p>UN : United Nations</p> <p>vPvB : Very Persistent and Very Bioaccumulative</p> <p>WGK: Water Hazards Class</p>

Full text of H, EUH and P statements used in sections 2 and 3

Hazard statements

H280 Contains gas under pressure; may explode if heated

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Precautionary statements

P410+P403 Protect from sunlight. Store in a well-ventilated place

Disclaimer of liability

Details given in this document have been prepared based on the most available reliable documents and are believed to be correct at the time of going to press

They do not claim to be exhaustive and should be considered as a guide