	SAFETY DATASHEET	Page : 1/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

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

1.1. Product identifier

Trade name	Helium 1.2% - Nitrogen 98.8%
Chemical description	Helium 1.2% - Nitrogen 98.8%
CAS N°	-
CE N°	-
Index N°	--
Registration n°	Listed in Annex IV / V REACH, exempted from registration
Chemical formula	He, N ₂

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

Relevant identified uses	Industrial and professional Aerosol propellant Bottom gas for mixtures. Overlying gases. Calibration gases. Carrier gas. Fire inhibitor gas. Food packaging gases. Inert gas Laboratory use Shield gas for welding processes
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

	SAFETY DATASHEET	Page : 2/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

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+403

Protect from solar radiation. 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
Nitrogen	(CAS-No.) 7727-37-9 (EC-No.) 231-783-9 (EC Index-No.) --- (Registration-No.) --	98.8%	Press. Gas (Comp.), H280
Helium	(CAS-No.) 7440-59-7 (EC-No.) 231-783-9 (EC Index-No.) --- (Registration-No.) --	1.2%	Press. Gas (Comp.), H280

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

Helium 1.2% - Nitrogen 98.8%

MTGXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

General advices	See a doctor. Show this safety data sheet to the attending physician
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	No adverse effects expected
In case of eyes contact	No adverse effects expected
In case of ingestion	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

Data not 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. Foam
Unsuitable extinguishing media	Do not use water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards	Exposure to fire may cause containers to rupture/explode
Hazardous combustion products	None


5.3. Additional information

Wear self-contained breathing apparatus for fire-fighting, if necessary

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 the staff to safe place
Personal protective equipment, see section 8

	SAFETY DATASHEET	Page : 4/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

6.2. Environmental precautions

-

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

See also sections 8 and 13

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. Pressurized contents

7.3. Specific end use(s)


-

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits

Component	CAS N°	Exposure value type	Value	Source
Nitrogen	7727-37-9	TWA	-	No occupational exposure limit value
			-	
		OEL	-	
			-	
Helium	7440-59-7	TWA	-	No occupational exposure limit value
			-	
		OEL	-	
			-	

	SAFETY DATASHEET	Page : 5/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation
Oxygen detectors should be used when asphyxiating gases may be released

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

Eye/face protection	Wear safety glasses with side shields. Standard EN 166
Skin / hand protection	Wear working gloves when handling gas containers. Standard EN 388 - Protective gloves against mechanical risk
Respiratory protection	Self-contained breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmospheres. Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with 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	Data not available
pH	Data not available
Melting point / Freezing point	-210°C (Nitrogen)
Boiling point	-196°C (Nitrogen)
Flash point	Data not available
Evaporation rate	Data not available
Flammability (solid, gas)	Data not available
Explosive limits	Data not available
Vapour pressure [20°C]	Data not available
Vapour pressure [50°C]	Data not available
Vapour density	Data not available
Relative density, liquid (water=1)	0.0012 g/cm ³ (20°C)
Relative density, gas (air=1)	0.9569

Helium 1.2% - Nitrogen 98.8%
MTGXXX

Water solubility	Data not available
Partition coefficient n-octanol/water (Log Kow)	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available
Explosive properties	Data not available
Oxidising properties	Data not available

9.2. Other information

Molar mass	27.71 g/mol
Critical temperature [°C]	Not applicable

SECTION 10: Stability and reactivity
10.1. Reactivity

No danger of reactivity other than the effects described in the sections below

10.2. Chemical stability

Stable under the recommended storage conditions

10.3. Possibility of hazardous reactions

Data not available

10.4. Conditions to avoid

None under the recommended conditions of use and storage (see section 7)

10.5. Incompatible materials

No reaction with any common materials in wet or dry conditions For additional information on compatibility refer to ISO 11114 standard

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

hazardous decomposition products should not be produced

Hazardous decomposition products are formed in the event of fire: nitrogen oxides (NO_x)

SECTION 11: Toxicological information

11.1. Chemical safety assessment

Acute toxicity	No information is available on the product itself
Skin corrosion/irritation	No information is available on the product itself
Serious eye damage/irritation	Data not available
Respiratory or skin sensitisation	No information is available on the product itself
Germ cell mutagenicity	No information is available on the product itself
Carcinogenicity	Data not available
Reproductive toxicity	No information is available on the product itself
STOT-single exposure – Target organ(s)	Data not available
STOT-repeated exposure	Data not available
Aspiration hazard	Data not available

11.2. Information on other hazards

The substance/mixture has no endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Assessment	No information is available on the product itself
-------------------	---

12.2. Persistence and degradability

Data not available

12.3. Bioaccumulative potential

Data not available

12.4. Mobility in soil


Data not available

12.5. Results of PBT and vPvB assessment

Data not available. The 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 has no endocrine disrupting properties

	SAFETY DATASHEET	Page : 8/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

12.7. Other adverse effects

This product is not associated with any known ecological toxicological effects

Effect on the ozone layer: No known effect with this product

Ozone depletion potential: None

Effect on global warming: No known effect with this product

Global warming potential: None

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 unused product in original cylinder to supplier
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., (Nitrogen, Helium)	COMPRESSED GAS, N.O.S., (Nitrogen, Helium)	COMPRESSED GAS, N.O.S., (Nitrogen, 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

-

	SAFETY DATASHEET	Page : 9/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

14.5. Environmental hazards

ADR/RID	No
IMDG	No
ICAO-TI / IATA-DGR	No

14.6. Special precautions for user

Data not available

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

Not applicable

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

No chemical safety assessment has been carried out

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>

	SAFETY DATASHEET	Page : 10/10
		Revised edition n° : 10.0
		Revision date : 10/2023
Helium 1.2% - Nitrogen 98.8%		MTGXXX

RID : Regulations concerning the international carriage of dangerous goods by rail
 RMM : Risk Management Measures
 STOT-SE : Specific Target Organ Toxicity - Single Exposure
 UN : United Nations
 vPvB : Very Persistent and Very Bioaccumulative
 WGK: Water Hazards Class

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

Precautionary statements

P410+403 Protect from solar radiation. 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