SAFETY DATA SHEET

Product:	Helium
SDS Nr.:	EN-HE-C-0001
Version:	1-1
Date:	September 2nd, 2019

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name:	Helium, compressed
Product form:	Gas
Chemical formula:	He
UN/ID no.:	UN 1963
Use:	Industrial and professional. Perform risk assessment prior to use
Company identification:	PRO rare & pure gases GmbH Westermühlstrasse 23 D-80469 München/Germany Phone: +49 89 552 978 60 See paragraph 16 "OTHER INFORMATION"
Emergency phone number:	**+ 49 89 552 978 60**

2. HAZARDS IDENTIFICATION

Hazards identification:	Compressed gas
Hazard pictograms:	GHS04
Signal word:	**Warning**

Hazard statement code:	H280
Hazard statement:	Gas under pressure. In high concentrations may cause asphyxiation. May explode if heated. Protect from sunlight when ambient temperature exceeds 50°C

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation:	Substance, sold as a pure product ~ 100%
Components/Impurities:	Contains no other components or impurities, which will influence the classification of the product
CAS Nr.:	7440-59-7
EC Nr.:	231-168-5
Exposure limits:	
Note 1:	Listed in Annex IV / V REACH, exempted from registration **EU DSD/DPD:** Not Classified - Data lacking **EU CLP:** Self Classified - Press. Gas - Comp., H280 **OSHA HCS 2012:** Press. Gas - Comp; Simple Asphyxiant

4. FIRST AID MEASURES

General advice:	Show this safety data sheet to the doctor in attendance
Inhalation:	Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing has stopped
Eye contact:	No treatment necessary. Get medical attention if symptoms occur
Skin contact:	No treatment necessary. Get medical attention if symptoms occur
Ingestion:	Ingestion is not considered a potential route of exposure

Most important symptoms and effects, both acute and delayed Symptoms:

Simple asphyxiant. May cause suffocation by displacing the oxygen in the air. Exposure to oxygen-deficient atmosphere (<19.5%) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of conscious-ness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help or protect them-selves. Lack of sufficient oxygen may cause serious injury or death.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Helium is non-flammable and does not support combustion. Use extinguishing media appropriate for the surrounding fire.
Special instructions:	Evacuate all personnel from area. Cool cylinders with water spray. If possible without risk, move cylinders away from fire area.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions;	Evacuate area. Wear self-contained breathing apparatus when in area unless atmosphere is safe. Ensure adequate ventilation
Environmental precautions:	Stop release. Prevent from entering sewers, basements and work pits, or any place its accumulation can be dangerous.
Clean up method:	Ventilate area

7. HANDLING AND STORAGE

Storage:	Store cylinders in a well-ventilated, secure area, protected from weather. Cylinders should be upright with valve outlet seals and valve protection caps in place. Do not allow storage temperature to exceed 50° C. Storage should be away from heavily travelled areas and emergency exits. Full and empty cylinders should be segregated. Use a first-in and first-out inventory system to prevent full containers from being stored for long periods of time.
Handling:	Do not drag, roll, slide or drop cylinders. Use a suitable truck designed for cylinders movement. Never attempt to lift a cylinder by its cap. Secure cylinders at all times while in use. Use a pressure reducing regulator to safely discharge gas from the cylinder. Use a check valve to prevent reverse flow into cylinder. Never apply flame or localized heat directly to any part of the cylinder. Do not allow any part of the cylinder to exceed 50° C. Once a cylinder has been connected to process, open cylinder valve slowly and carefully. If user experiences any difficulty operating cylinder valve, discontinue use and contact supplier. Use an adjustable strap-wrench to remove over-tight or rusted caps. Helium is chemically inert; therefore, it is compatible with all materials of construction.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Guidelines:	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies
Eye/face protection:	Wear safety glasses with side shields (or goggles)
Skin and body protection:	Work gloves and safety shoes are recommended when handling gas cylinders
Respiratory protection:	Use positive pressure airline respirator with escape cylinder, or self-contained breathing apparatus for oxygen-deficient atmospheres (oxygen <19.5%)
General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, odour and state:	Colourless, odourless gas
Molecular weight:	4 g/mol
Boiling point (at 1 atm):	-272,15° C
Melting point:	-269° C
Relative density, gas:	0,138 (air=1)
Vapor pressure (at 20° C):	Not known
Solubility mg/l water:	2,5 mg/l

10. STABILITY AND REACTIVITY

Stability and reactivity:	Stable under normal conditions

11. TOXICOLOGICAL INFORMATION

General: No known toxicological effects from this product

Acute toxicity
Aspiration Hazard
Carcinogenicity
Germ Cell Mutagenicity
Skin corrosion/Irritation
Skin sensitization
STOT-RE
Toxicity for Reproduction
Respiratory sensitization
Serious eye damage/Irritation

EU/CLP • Classification criteria not met

OSHA HCS 2012 • Classification criteria not met

12. ECOLOGICAL INFORMATION

General:	No known ecological damage caused by this product.
12.1 Toxicity:	No data available
12.2 Persistence and degradability:	No data available
12.3 Bio-accumulative potential:	No data available
12.4 Mobility in Soil:	No data available

13. DISPOSAL CONSIDERATION

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

14. TRANSPORT INFORMATION

Helium, compressed; non-flammable nontoxic gas

Proper shipping name:	2.2
Hazard Class:	UN 1046
Identification number:	2.1oA
ADR/RID Classification code:	20
ADR/RID Hazard Nr.:	**Helium, compressed**
DOT:	

UN/ID no.:	UN1046; non-flammable gas
Proper shipping name:	Compressed gas, n.o.s.
Hazard Class:	2.2
Labelling DOT:	2.2 non-flammable gas
IATA/ICAO:	**Helium, compressed**

UN/ID no.**:**	UN1046; non-flammable gas
Proper shipping name:	Compressed gas, n.o.s.
Hazard Class:	2.2

IMO/IMDG:	**Helium, COMPRESSED**
UN/ID no.:	UN 1046; non-flammable gas
Proper shipping name:	Compressed gas, n.o.s.
Hazard Class:	2.2

Other transport information: Cylinders should be transported in a secure upright position in a well-ventilated area. Never transport in passenger compartment of a vehicle. Before transporting product containers, ensure that they are firmly secure and

- cylinder valve is closed and not leaking;
- valve outlet cap nut or plug (where provided) is correctly fitted
- valve protection device (where provided) is correctly fitted
- there is adequate ventilation
- compliance with applicable regulations.

15. REQULATORY INFORMATION:

Safety, health & environmental: Ensure all national/local regulations are observed.

Regulations/legislation specific for the substance or mixture: **SARA Hazard Classifications** I Pressure (Sudden Release of)

Seveso regulation 96/82/EC: Not covered

16. OTHER INFORMATION

NFPA Rating: HEALTH=1 FIRE=0 REACTIVITY=0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Last revision date: Preparation date: September 2nd, 2019

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 from its use can be accepted. This SDS is for information purposes only and is subject to change without notice.

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