

# SAFETY DATA SHEET

## Helium Micro-Cylinders

PRODUCT: HELIUM MICRO-CYLINDER

MSDS: MC-SDS-001

VERSION: 1

DATE: 20 MAY 2002

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

Product names: Helium packaged as:  
Helium Micro-Cylinder 3mL, 4mL or 5mL.  
This data sheet covers all variants

Chemical formula: He

Company identification: See header

### 2 COMPOSITION / INFORMATION ON INGREDIENTS

Substance / preparation: Substance

Components / impurities: Contains no other components or impurities which will influence the classification of the product.

CAS Number: 07440-59-7

EEC Number:  
(from EINECS) 231-168-5

### 3 HAZARDS IDENTIFICATION

Hazards identification: Compressed gas.  
In high concentrations may cause asphyxiation.

### 4 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: Not considered a potential route of exposure.

## 5 FIRE FIGHTING MEASURES

Specific hazards: Exposure to fire may cause micro-cylinders to rupture / explode.

Hazardous combustion products: None

Suitable extinguishing media: All known extinguishants can be used.

Specific methods: Move micro-cylinders away or cool with water from a protected position.

Special protective equipment for fire fighters: In confined space use self-contained breathing apparatus.

## 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate air ventilation.

Environmental precautions: Try to stop release.

Clean up methods: Ventilate area.

## 7 HANDLING AND STORAGE

Handling and storage: Keep micro-cylinders below 50°C in a well ventilated place. Store within supplied packaging trays. Avoid dropping micro-cylinders onto floor. Do not break micro-cylinder stems.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection: Always wear safety glasses when handling unpacked micro-cylinders. Ensure adequate ventilation.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight:	4
Melting point:	Not applicable
Boiling point:	-269°C
Critical temperature:	-268°C
Relative density, gas:	0.14 (air = 1)
Relative density, liquid:	Not applicable
Vapour pressure, 20°C:	Not applicable
Solubility in water:	1.5 mg/L
Appearance / colour:	Colourless gas
Odour:	No odour warning properties

#### 10 STABILITY AND REACTIVITY

Stability and reactivity: Stable under normal conditions.

#### 11 TOXICOLOGICAL INFORMATION

General: No known toxicological effects from this product.

#### 12 ECOLOGICAL INFORMATION

General: No known ecological damage caused by this product.

#### 13 DISPOSAL CONSIDERATIONS

General: Always wear safety glasses when disposing of micro-cylinders. Discharge to atmosphere in a well ventilated place. Do not discharge into any place where gas accumulation could be dangerous. Point tip away from yourself and other people when discharging full micro-cylinders. Contact supplier if guidance is required.

#### 14 TRANSPORT INFORMATION

UN number:	1046
Class / Div:	2.2
ADR/RID item number:	2,1° A
ADR/RID hazard number:	20
Labelling ADR:	Label 2; non flammable non toxic gas
Other information:	<p>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 micro-cylinders ensure that they are firmly secured and:</p> <ul style="list-style-type: none"> <li>■ packaging is not damaged</li> <li>■ there is adequate ventilation</li> <li>■ compliance with applicable regulations</li> </ul>

## 15 REGULATORY INFORMATION

Number in Annex I of Directive 67/548:	Not included in Annex I
EU classification:	Not classified as a dangerous substance
Labelling symbols:	Label 2; non flammable non toxic gas

## 16 OTHER INFORMATION

Ensure all national / local regulations are observed. Asphyxiant in high concentrations. Keep products in a well ventilated place. Do not breathe the gas. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Users of breathing apparatus must be trained. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. 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.

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