



# Safety Data Sheet

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## HELIUM

### 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Product name** Helium, compressed  
**Chemical name/formula** Helium / He  
**Company identification** See header and footer  
**Emergency phone no.** See footer

### 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 No.** 7440-59-7

### 3. HAZARDS IDENTIFICATION

**General**

- Non-flammable 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 or 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.

**Skin/Eye contact**

- No adverse effects anticipated.

**Ingestion**

- Ingestion is not considered a potential route of exposure.

### 5. FIRE-FIGHTING MEASURES

**Specific hazards**

- Exposure to fire may cause containers to rupture or explode.

**Hazardous combustion products**

- None.

**Suitable extinguishing media**

- All known extinguishants can be used.

**Specific methods**

- If possible, stop flow of product.
- Move container away or cool with water from a protected position.

**Special protective equipment (for fire fighters)**

- In confined space, use a self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

- Evacuate area.
- Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
- Ensure adequate air ventilation.

**Environmental precautions**

- Try to stop release.

**Clean up methods**

- Ventilate area.

### 7. HANDLING & STORAGE

**General**

- Suck back of water into the container must be prevented. Do not allow back-feed into the container.
- Use only properly specified equipment, which is suitable for this product, its supply pressure and temperature.
- Keep container below 50°C in a well-ventilated place.
- Refer to SOXAL's booklet on "safe handling, transport and storage of compressed gas cylinder" or contact SOXAL if in doubt.

### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

**Exposure limit value**

- None.

**Personal protection**

- Ensure adequate ventilation.

### 9. PHYSICAL & CHEMICAL PROPERTIES

**Molecular weight** 4  
**Melting point** - 189°C  
**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 mg/l water** 1.5 mg/l  
**Appearance/Colour** Colourless gas  
**Odour** No odour warning properties  
**Auto-ignition temperature** Not applicable  
**Flammability range** Not flammable

### 10. STABILITY & REACTIVITY

**General**

- Stable under normal conditions.

### 11. TOXICOLOGICAL INFORMATION

**General**

- No known toxicological effects from this product.

### 12. ECOLOGICAL INFORMATION

**General**

- No known ecological effects from this product.

For product and/or safety enquiry, please send, call, fax or log on to:

**SINGAPORE OXYGEN AIR LIQUIDE PTE LTD**  
16, Jalan Buroh, Singapore 619475.

Tel: (65) 6265 3788 or 6265 4555 Fax: (65) 6265 1441 or 6268 8403 Website: [www.soxal.com](http://www.soxal.com) Business Registration No: 197001157D

## HELIUM

### 13. DISPOSAL CONSIDERATIONS

**General**

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

### 14. TRANSPORT INFORMATION

**UN No.** 1046  
**Class/Division** 2.2 (Non-Flammable Gas)  
**Subsidiary risk** None  
**UN proper shipping name** Helium, compressed  
**IMO/IATA shipping label**



**Other transport information**

- 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 containers, ensure that they are firmly secured and:
  - compliance with applicable regulations;
  - 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; and
  - there is adequate ventilation.

### 15. REGULATORY INFORMATION

**General**

- Singapore's WSH (General Provisions) Regulations 2006, Sections 42 & 43.
- Singapore Standards:
  - CP 12:2000 Part 1
  - CP 98:2003
  - SS 152:2003
  - SS 286:1984 Part 1 to Part 5

**Risk and Safety phrases**

- S51 – Use only in well ventilated area.

### 16. OTHER INFORMATION

**General**

- Ensure all local regulations or legislations are observed.
- Asphyxiant in high concentrations. Keep container in a well-ventilated place. Do not breathe gas.
- The hazard of asphyxiation is often overlooked and must be stressed before use.
- 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 revising.
- 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.
- This safety data sheet is for information purposes only and is subjected to change without notice.

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