



Safety Data Sheet – Helium

1. Identification of the substance/preparation and the company/undertaking

Identification of the substance/preparation : Helium
Chemical Formula : He
Synonyms : Helium, Helium Gas, Balloon Gas
Use of the substance/preparation : General Industrial/Retail

Company :

Dixons of Westerhope
 Newbiggin Lane
 Westerhope
 Newcastle upon Tyne
 NE5 1LX
 Telephone : 0800 433 4331

2. Composition/information on ingredients

Components	EINECS/ELINCS	CAS Number	Concentration	Classification
Helium	231-168-1	7440-59-7	99%	

Refer to section 16 for full text of each relevant A-phrase.

Concentration is nominal. For the exact product composition, please refer to Dixons technical specifications.

3. Hazards Identification

Classification

R00 There are no known health hazards.

Emergency overview

High pressure gas.

Can cause lung damage or central nervous system effects.

Self-contained breathing apparatus (SCBA) may be required.

Potential health effects

Inhalation :	In high concentrations may cause asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves.
Eye contact :	No adverse effect.

Skin contact :	No adverse effect.
Ingestion :	Ingestion is not considered a potential route of exposure.
Chronic health hazard :	Not applicable.
Aggravated medical condition :	None
Symptoms :	Exposure to oxygen deficient atmosphere may cause the following symptoms – Dizziness. Salivation. Nausea. Vomiting. Loss of mobility/consciousness.

4. First Aid measures

General Advice :	Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
Eye contact :	Not applicable.
Skin contact :	Not applicable.
Ingestion :	Ingestion is not considered a potential route of exposure.
Inhalation :	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen.

5. Fire-Fighting measures

Suitable extinguishing media :	All known extinguishing media can be used.
Specific hazards :	Upon exposure to intense heat or flame, cylinder will vent rapidly or rupture violently. Product is non-flammable and does not support combustion. Move away from container and cool with water from a protected position. Keep containers and surroundings cool with water spray.
Special protective equipment :	Wear self-contained breathing apparatus for fire fighting if necessary. For Fire-Fighters.

6. Accidental release measures

Personal precautions :	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level. Evacuate personnel to safe areas. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Monitor oxygen level. Ventilate area.
Environmental precautions :	Do not discharge into any place where its accumulation could be dangerous. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up :	Ventilate the area.
Additional advice :	If possible, stop flow of product. Increase ventilation to the release area and monitor oxygen level. If leak is from cylinder or cylinder valve, call the Dixons emergency telephone number. If the leak is in the user's system, close the cylinder valve, safely vent the pressure, and purge with an inert gas before attempting repairs.

7. Handling and storage

Handling : Protect cylinders from physical damage; do not drag, roll, slide or drop. Do not allow storage area temperature to exceed 50°C (122°F). Only experienced and properly instructed persons should handle compressed gases. Before using the product, determine its identity by reading the label. Know and understand the properties and hazards of the product before use. When doubt exists as to the correct handling procedure for a particular gas, contact the supplier. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Leave valve protection caps in place until the container has been secured against either a wall or bench or paced in a container stand and is ready for use. Use an adjustable strap wrench to remove over-tight of rusted caps. Before connecting the container, check the complete gas system for suitability, particularly for pressure rating and materials. Before connecting the container for use, ensure the back feed from the system into the container is prevented. Ensure the complete gas system is compatible for pressure rating and materials of construction. Ensure the complete gas system has been checked for leaks before use. Employ suitable pressure regulating devices on all containers when the gas is being emitted to systems with lower pressure rating than that of the container. Never insert and object into valve cap openings. Doing so may damage valve, causing a leak to occur. Open valve slowly. If user experiences any difficulty operating cylinder valve discontinue use and contact supplier. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Close valve after each use and when empty. Do not subject containers to abnormal mechanical shocks which may cause damage to their valve or safety devices. Never attempt to lift a cylinder by its valve protection cap or guard. Do not use containers as rollers or supports or for any other purpose than to contain the gas as supplied. Never strike an arc on a compressed gas cylinder or make a cylinder a part of an electrical circuit. Do not smoke while handling product or cylinders. Never re-compress a gas or a gas mixture without first consulting the supplier. Never attempt to transfer gases from one cylinder/container to another. Always use back flow protective device in piping. When returning cylinder install valve outlet cap or plug leak tight. Never use direct flame or electrical heating devices to raise the pressure of a container. Containers should not be subjected to temperatures above 50°C (122°F). Prolonged periods of cold temperature below -30°C (-20°F) should be avoided.

Storage : Full containers should be stored so that oldest stock is used first. Containers should be stored in a purpose built compound which should be well ventilated, preferably in the open air. Stored containers should be periodically checked for general condition and leakage. Observe all regulations and local requirements regarding storage of containers. Protect containers stored in the open against rusting and extremes of weather. Containers should not be stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent toppling. The container valve guards or caps should be in place. Keep containers tightly closed in a cool, well-ventilated. Store containers in a location free from fire risk and away from sources of heat or ignition. Full and empty cylinders should be segregated. Do not allow storage temperatures to exceed 50°C (122°F). Return empty containers in a timely manner.

Technical measures/precautions : Containers should be segregated in the storage area according to the various categories (e.g. flammable, toxic, etc.) and in accordance with local regulations. Keep away from combustible material.

8. Exposure controls/personal protection

Respiratory protection :	Self-contained breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmosphere. Air purifying respirators will not provide protection. Users of breathing apparatus must be trained.
Hand protection :	Sturdy work gloves are recommended for handling cylinders. The breakthrough time of the selected glove(s) must be greater than the intended use period.
Eye protection :	Safety glasses are recommended when handling cylinders.
Skin and body protection :	Safety shoes are recommended when handling cylinders.
Special Instructions :	Ensure adequate ventilation, especially in confined areas.
Remarks :	Simple asphyxiant.

9. Physical and chemical properties

Form :	Compressed gas.
Colour :	Colourless gas.
Odour :	No odour or warning properties.
Molecular weight :	4 g/mol
Relative vapour density :	0.14 (air - 1)
Density :	Not Applicable
Specific volume :	6.037 m ³ /kg at 21°C
Boiling point/range :	-269°C
Critical temperature :	-268°C
Melting point/range :	Not Applicable
Water solubility :	1.5 mg/l

10. Stability and reactivity

Stability :	Stable under normal conditions.
Hazardous decomposition products :	None.

11. Toxicological information

No known toxicological effects from this product.

12. Ecological information

Ecotoxicity effects	
Aquatic toxicity :	No data available.
Toxicity to other organisms :	No data available.
Persistence and degradability	
Mobility :	No data available.
Bioaccumulation :	No data available.
Further Information :	This product has no known eco-toxicological effects.

13. Disposal considerations

Waste from residues/unused product :	Contact supplier if guidance is required. Return unused product in original cylinder to
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	supplier.
Contaminated packaging :	Return cylinder to supplier.

14. Transport Information ADR

Proper shipping name :	Helium compressed.
UN/ID no. :	UN1046
Labelling ADA :	2.2
ADR/RID hazard ID no. :	20
IATA	
Proper shipping name :	Helium compressed.
Class :	2.2
UN/ID no. :	UN1046
IMDG	
Proper shipping name :	Helium compressed.
Class :	2.2
UN/ID no. :	UN1046
RID	
Proper shipping name :	Helium compressed.
Class :	2.2
UN/ID no. :	UN1046
Further Information :	Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of potential hazards of the load and knows what to do in the event of an accident or an emergency.

15. Regulatory information

Labelling according to EEC directive
Number in Annex I of Dir : Not included in Annex I. 67/548

Hazard Symbol : No EC labelling required.

Country	Regulatory list	Notification
USA	TSCA	Included on inventory
EU	EINECS	Included on inventory
Canada	DSL	Included on inventory
Australia	AICS	Included on inventory
South Korea	ECL	Included on inventory
China	SEPA	Included on inventory
Philippines	PICCS	Included on inventory
Japan	ENCS	Included on inventory

16. Other information

Ensure all national/local regulations are observed.

R-phrase(s) Substance/preparation : R00 There are no known health hazards.

Components prepared by : Dixons of Westerhope Limited.

This safety data sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

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.