Helium - Material Safety Data Sheet

SUPPLIER

Supplier Name:	Rent Free Gas
Address:	1/131 Richmond Rd, RICHMOND SA 5033
Telephone:	1300 792 603
Emergency:	**24hr EMERGENCY TELEPHONE No. 1300 792 603**
Emergency:	**DIAL 000**
Website:	www.rentfreegas.com.au

HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA
CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Product Name:	Helium, compressed
Chemical Name:	Helium
Manufacturer's Code:	Helium
UN Number:	1046
DG Class:	2.2
Packaging Group:	Not applicable
Subsidiary Risk(s):	None
Hazchem Code:	2 (T)
EPG No:	2C1
Poisons Schedule:	None assigned

Uses: In balloons and airships, as a dilutent for the other gases. In lasers, in welding and also in offshore diving industry.

COMPOSITION / INFORMATION ON INGREDIENTS

Appearance:	Colourless gas, odourless gas
Boiling Point:	-269 degrees C
Vapour Pressure:	Not applicable
Volatiles:	100%
Evaporation Rate:	Not applicable
Odour:	Odourless
Vapour Density:	0.1785g/L @ 00C (Air=1) Very much lighter than air.
Weight per ml:	Not applicable
Flash Point:	None
Flammability Limits:	None
Auto-Ignition Temperature:	None
Solubility in Water	Very Slightly

OTHER PROPERTIES:

Almost completely inert. May be absorbed by platinum metal.

INGREDIENTS:

Name: Helium CAS: (7440-59-7) Proportion: 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

A simple asphyxiant

Acute:	Swallowed: No liquid phase.
Skin:	Not irritating to the skin.
Eyes:	Not irritating to the eye.
Inhaled:	Simple asphyxiant. May replace oxygen in the atmosphere. Symptoms of approaching asphyxia include accelerated pulse rate, increase in the rate and volume of respiration, decreased ability to think clearly, inattention and loss of muscle coordination. At only 10-14% oxygen, judgment becomes faulty; there may be an inability to feel pain, rapid fatigue. At only 10% oxygen there may be nausea and vomiting and an inability to move. Below 6% oxygen, breathing is likely to be in gasps, with risk of convulsions. Breathing a pure Argon atmosphere may result in immediate loss of consciousness and death within a few minutes.
Chronic:	Breathing atmospheres of very low oxygen (less than 10%) may result in permanent brain damage.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre **Ph: 13 11 26**

Swallowed:	Not applicable.
Skin:	Not applicable.
Eyes:	Not applicable.
Inhaled:	Remove from exposure, but avoid becoming a casualty. Apply artificial respiration if not breathing, preferably using an automated oxygen resuscitator.Rest and keep warm. Obtain medical attention.

FIRST AID FACILITIES

Recommended:	Oxygen resuscitation equipment. Self contained breathing apparatus, and trained personnel, for rescue operations.
Advice to Doctor:	Treat for asphyxia.

EXPOSURE LIMITS

National Occupational Health & Safety Commission (NOHSC)

Exposure Limits:	(NOHSC)
TLV-TWA:	Simple asphyxiant, no standards assigned.
TLV-STEL:	Simple asphyxiant, no standards assigned.
Engineering Controls:	Ensure adequate ventilation (same as outdoors) when using. Prevent use in enclosed or low-lying spaces-gas heavier than air and may form an asphyxiating gas blanket. Observe good engineering practice to prevent leaks from regulators, fittings, connectors and tubing. Consider local mechanical exhaust/extraction or positive airflow to prevent build up argon in atmosphere. Secure cylinders at all times.
Personal Protection:	Do not breathe gas. Wear safety boots, leather gloves and safety glasses, as appropriate to mode of use, quantity handled and degree of hazard: Self Contained Breathing Apparatus Positive pressure or Air-hood
Flammability:	Not Flammable.

STORAGE AND TRANSPORT

Storage Temperature:	Room Temperature
UN Class:	2.2 Non-Flammable, Non-toxic gas
Packaging Group:	Not assigned
UN Number:	1046 Helium, compressed
EPG Number:	2C1
Correct Shipping Name:	Helium, compressed

Observe requirements of The Australian Code for the Transport of Dangerous Goods by Road and Rail. Observe the requirements of State Dangerous Goods (Storage and Handling) Regulations.

STORAGE ADVICE

Store cylinders upright in an enclosure, preferably outside of buildings, protected from direct sunlight. Secure cylinders by chains or similar device to prevent falling over. Store cylinders below 45ºC. Keep away from flammable or combustible materials. Keep away from vehicular traffic and other thoroughfares. Prevent leaking gases from collecting in enclosed or low-lying spaces - gas in heavier than air. Protect from physical damage. Protect regulators and other fittings from impact.

SPILLS AND DISPOSAL

CAUTION: Before dealing with spillage take the necessary protective measures, inform others to keep at a safe distance and shut off all possible sources of ignition. Contact supplier for specific assistance. Allow gas to escape to atmosphere, preferably in an open remote location. Prevent vented gas from re-entering ventilation intakes, low-lying spaces, cellars, drains, sewers or similar.

FIRE/EXPLOSION HAZARD

Not a fire hazard. Non-flammable gas, may extinguish fire. Heat from a fire may cause cylinder to rupture. Cool cylinders with water, spray from a protected place. Do not approach cylinders that may be hot. Evacuate if cylinders cannot be cooled.

DECOMPOSITION PRODUCTS

Helium
In case of small fire/explosion use: Water
In case of major emergency:

Hazchem Code:	2 (T)
Extinguishant:	Water fog or fine water spray
Danger of violent reaction or explosion?	No
Protective Clothing:	Breathing apparatus and protective gloves.
Appropriate Measures:	Dilute
Evacuate?	No

OTHER INFORMATION

Do not use leaking or damaged cylinders, regulators and fittings. Do not use oil or grease on cylinders or fittings.Always use mechanical handling and/or lifting devices. Open cylinders slowly to avoid pressure shocks on downstream equipment. Always use gas pressure regulators properly matched to downstream equipment.

Report Reviewed: 5th December 2015