

# HELIUM (Compressed)

SAFETY DATA SHEET

(SDS Number – PGC H042017)

Effective Date: April 2017

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product Identifier

**PRODUCT NAME:** Helium, Compressed

**SYNONYMS:** Balloon Gas, Helium Compressed

### 1.2 Uses and uses advised against

Uses: Balloon Gas, Laser Applications, Welding Applications

### 1.3 Details of the supplier of the product

Pacific Gas Pty Limited,  
43 Malvern Road,  
Baywater, VIC, 3153  
Contact Telephone: (61) 408 350 180  
Email: info@pacgas.com.au

### 1.4 Emergency telephone number(s)

Contact Telephone: (61) 408 350 180

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA**

**GHS classification(s)** Gases Under Pressure:  
Compressed gas

### 2.2 Label elements

**Signal word: WARNING**

## Pictogram(s)



### Hazard statement(s)

H280: Contains gas under pressure; may explode if heated

### Prevention statement(s)

Non allocated

### Response statement(s)

Non allocated

### Storage Statement(s)

P410 and P403: Protect from sunlight. Store in a well-ventilated place

### Disposal Statement(s)

None allocated

### 2.3 Other hazards

Asphyxiant, this product may displace oxygen and cause suffocation.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS No	EC Number	Percentage
Helium	7440-59-7	231-168-5	99.0%

### 4. FIRST AID MEASURES

#### 4.1 Description of First Aid Measures

**EYE CONTACT:** None.

**INHALED:** Remove from exposure. If not breathing apply artificial respiration if possible using an automated oxygen resuscitator. Seek medical attention. For advice call the Poisons Information Centre on **13 11 26** or alternatively call a Doctor.

**SKIN ABSORPTION:** None required.

**INGESTION:** Considered unlikely.

**FIRST AIDE FACILITIES:** No information provided.

#### 4.2 Most important symptoms and effects, both acute and delayed

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility / consciousness. Victim may not be aware of asphyxiation. In low concentrations may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of co-ordination.

#### 4.3 Immediate medical attention and special treatment needed

Treat for asphyxia

### 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing Media:

Use water spray or fog to cool cylinders or containers in the adjacent area.

#### 5.2 SPECIAL HAZARDS ARISING FROM SUBSTANCE OR MIXTURE:

Non flammable.

#### 5.3 Advice for firefighters

If possible, remove cool cylinders from the path of the fire. Evacuate the area if unable to move cylinders and they are exposed to the fire. Cylinders exposed to fire should not be moved until they have cooled.

#### 5.4 Hazchem Code

##### 2T

2	Fine Water Spray
T	Wear full fire kit and breathing apparatus. Dilute spill and run off.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

If cylinder is leaking and you are unable to stop the leak, evacuate personnel from the area. Contact your gas supplier for expert advice. Use of PPE as detailed in Section 8.

#### 6.2 Environmental precautions

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

#### 6.3 Methods of cleaning up

Carefully move material to a well ventilated remote area, then allow gas to escape to atmosphere. Do not attempt to repair leaking valve or cylinder safety devices.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for Safe Handling

Use of safe work practices to avoid inhalation. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement. Only use gas regulators / equipment suitable for the cylinder gas type and working pressure. Close the cylinder valve after each use.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store and use with adequate ventilation in a secure area; below 45°C, in an area constructed of non-

combustible material with firm level floor. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling or being knocked over. There should be no sources of ignition in the area.

### 7.3 Specific end use(s)

No information provided

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Argon	SWA (AUS)	Asphyxiant			

### Biological limits

No biological limit values have been entered for this product

### 8.2 Exposure controls

Provide adequate natural or explosion-proof mechanical ventilation to minimize or eliminate exposure. Confined areas (e.g. tanks) should be adequately ventilated or gas tested.

### PPE

<b>Eye / Face</b>	safety glasses
<b>Hands Wear</b>	Chemical resistant impervious gloves
<b>Body Wear</b>	appropriate safety boots
<b>Respiratory</b>	If in a confined area, use an air purifying or air fed respirator complying with an approved standard



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Colourless gas
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ODOUR Odour	Odourless
Flammability	Non Flammable
Flash point	Not relevant
Boiling point	-268.9°C
Melting point	-272.2°C @ 26atm
Evaporation rate	Not Applicable
pH	Not Applicable
Vapour density	Not Available
Specific gravity	Not Applicable
Solubility (water)	Not Available
Vapour pressure	Not Available
Upper explosion limit	Not relevant
Lower explosion limit	Not relevant
Partition coefficient	Not Available
Autoignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	Not Available
Explosive properties	Not Available
Oxidising properties	Not Available
Odour threshold	Not Available

### 9.2 Other information

% Volatiles	100%
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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No specific test data related to reactivity for this product is available. It is important to carefully review all information provided below.

### 10.2 Chemical stability

Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal conditions of storage.

### 10.4 Conditions to avoid

Avoid shock, friction, heavy impact and heat sources.

### 10.5 Incompatible materials

Compatible with most commonly used materials.

### 10.6 Hazardous decomposition products

This material will not decompose to form a hazardous product other than that already present.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met
Skin	Not irritating to the skin
Eye	Not irritating to the eye
Sensitisation	Not classified as causing skin or respiratory sensitisation
Mutagenicity	No significant ingredient is classified as a mutagen
Carcinogenicity	No significant ingredient is classified as a carcinogen
Reproductive	No significant ingredient is classified as a reproductive toxin
STOT – single exposure	Asphyxiant. Effects are proportional to oxygen displacement. Over exposure may result in dizziness, drowsiness, weakness, fatigue, breathing difficulties and unconsciousness.
STOT – repeated exposure	Not classified as causing organ damage from repeated exposure
Aspiration	Not classified as causing aspiration

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Not available.

### 12.2 Persistence and degradability

Not available

### 12.3 Bioaccumulative potential

Not available

### 12.4 Mobility in soil

No information provided.

### 12.5 Other adverse effects

Product is not harmful to the environment

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Waste disposal:** Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier. Unserviceable cylinders should be

returned to the supplier for safe and proper disposal.

**Legislation:** Dispose of in accordance with relevant local legislation

## 14. TRANSPORT INFORMATION

**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN Number	1046	1956	1956
Proper Shipping Name	Helium, Compressed	Helium, Compressed	Helium, Compressed
Transport Hazard Class	2.2	2.2	2.2
Packing Group	None allocated	None allocated	None allocated

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

**Hazchem code: 2T**

**GTEPG: 2C1**

**EMS: F-C, S-V**

**Other information:** Cylinders should be transported in a secure position, in a well ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards and should be discouraged.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison Schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).	
Classifications	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].	
Hazard Codes		Non Allocated
Risk Phrases		Non Allocated
Safety Phrases		Non Allocated
Inventory Listings	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt	

## 16. OTHER INFORMATION

Other Information	<b>Application method:</b> Never open an argon cylinder valve without the regulator attached. Use only a gas regulator of suitable pressure and flow rating fitted to cylinder.
	<b>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:</b> The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.
	<b>HEALTH EFFECTS FROM EXPOSURE:</b> It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

### INFORMATION PREPARED BY:

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