

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER


Product Name	Helium 22.3L and 13.4L tanks.
Other Names (if applicable)	helium, compressed; He
Product Code	E2019, E930
Barcode Number	Not Available
Recommended Use	Balloon gas, Consumer use
Company Name	IG Design Group Australia Pty Limited
ABN	58 052 145 310
Street Address	121 Rayhur Street, Clayton South, Victoria, 3169, Australia
Telephone Number	+613 9541 0500
Supplier Code	Not Applicable
Other Emergency Phone Number	Australia - 13 11 26 (Poisons Information Centre)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
According to the WHS Regulations and the ADG Code.

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.
Classification: Gas under pressure - Compressed gas.

Label elements

<i>GHS label elements</i>				
<i>Signal Word</i>	WARNING			

Hazard statement (s)

H280: Contains gas under pressure; may explode if heated.

Precautionary statement (s)

Prevention
Not Applicable
Response
Not Applicable
Storage/Disposal
P410+P403: Protect from sunlight. Store in a well-ventilated place.

Other hazards

None

SAFETY DATA SHEET



SDS Version Number: 1.0
 SDS Version Date: 17/04/2018

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (phone Australia 13 11 26) or a doctor

(For each route of exposure provide indication of medical attention and special treatment needed including description of most important symptoms, acute and delayed)

Inhalation	Following exposure to gas, remove the patient from the gas source or contaminated area. If the patient is not breathing spontaneously, administer rescue breathing. If the patient does not have a pulse, administer CPR. Contact emergency medical services.
Skin Contact	If skin contact occurs; wash thoroughly with soap and water until product is removed. First Aid is not generally required. In case of cold burns due to extended product release and skin contact; wash area in lukewarm water (not hot) and then immerse for 10 minutes without rubbing. Lightly dry the area and dress with gauze before seeking medical attention.
Eye Contact	Immediately flush the contaminated eye(s) with lukewarm water, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek medical attention immediately. Removal of contact lenses should only be attempted by skilled professionals.
Ingestion	Not an expected route of exposure.
Note to Physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products	Non-flammable noble gas, no combustion products. Main hazard in a fire situation is the risk of gas cylinders explosively rupturing. Ruptured cylinders may rocket.
Precautions for firefighters and special protective equipment	Wear full fire kit and Self Contained Breathing Apparatus (SCBA). There may be risk of gas cylinders violently rupturing due to gas expansion. If large quantities of material are released it can cause asphyxiation. Dilute gas collected in confined spaces by removing confinement, noting that helium is lighter than air. Contact with rapidly released gas can cause cold burns or frostbite. HAZCHEM: 2T
Suitable / Unsuitable extinguishing material	No restrictions on extinguishing medium. Select based on surrounding materials. Use an excess of fine water spray to cool gas cylinders and adjacent area.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures	Avoid breathing vapour and any contact with liquid or gas. Increase ventilation. Avoid entering confined spaces where gas has been released, monitor oxygen levels before entering. Wear suitable protective equipment.
Methods and materials for containment and clean up	Not applicable beyond increasing ventilation.
Environmental precaution(s)	None.

7. HANDLING AND STORAGE

Precautions for safe handling	Protect cylinders from physical damage, do not roll, slide or drop. Do not subject cylinder to temperatures that exceed 50°C and avoid prolonged periods of extreme cold below -30°C. Do not deface or cover labels identifying product. If cylinder weight is beyond a manageable load, use a mechanical aid such as a trolley to transport. Leave valve protection caps in place until product is secured to a wall or bench and ready for use. Ensure regulators that are to be attached to cylinder for use are rated and able to accept the helium to be dispensed. Ensure system is free of leaks by leak checking using a gas detector or bubble test. Avoid damaging the valve and creating leaks by never inserting objects into the valve cap openings. Any cylinders showing signs of damage should be tagged out with "do not use". Ensure that the valve is closed after each use and when cylinder has been emptied. Insert valve cap once cylinder has been emptied. Never expose cylinder to a flame or heating devices.
Conditions for safe storage	Store cylinders in a purpose built compound which is well ventilated and preferably open to the air. Store in a location free from the risk of fire and away from sources of heat and ignition. Protect from weather extremes. Do not store containers in locations likely to encourage corrosion. Always store containers in a vertical position and secured to prevent toppling. Keep valves tightly closed and ensure valve cap remains in place. Periodically check the condition of cylinders and ensure there are no leaks. Segregate full cylinders from empty cylinders. Do not allow storage temperatures to exceed 50°C. Always return empty cylinders in a timely manner.

SAFETY DATA SHEET



SDS Version Number: 1.0
 SDS Version Date: 17/04/2018

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

	Standard Name	TWA ppm	TWA mgm3	STEL ppm	STEL mgm3	Note
National Exposure Standards	Helium	-	-	-	-	Asphyxiant
Biological Limit Values	Not Available					
Engineering Controls	Ensure adequate natural or mechanical ventilation when dispensing product. Avoid creating oxygen deficient atmospheres below 19.5% oxygen.					
Personal Protective Equipment	Wear suitable fabric or leather work gloves and eye protection when handling cylinders.					

SAFETY DATA SHEET



SDS Version Number: 1.0
 SDS Version Date: 17/04/2018

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Compressed gas
Colour	Colourless
Odour	Odourless
pH	Not Applicable
Specific Gravity or Density	0.14 / 0.1786g/L @ STP
Vapour Pressure	0.0000022kPa (2.0K) : 3.17kPa (5.0K) : 197.1kPa
Vapour Density	Not Available
Percent Volatiles	100%
Boiling Point Range	233.3°C
Freezing/ Melting Point	Not Available
Solubility	0.0015g/L in water
Flash Point (include method detection)	Not Applicable
Flammability Limits	Not Applicable
Ignition Temperature	Not Applicable
Kinematic Viscosity (include temperature)	Not Applicable
Other	None

10. STABILITY AND REACTIVITY

Reactivity	Under normal storage conditions and use, hazardous reactions will not occur.
Chemical Stability	Product is considered stable under recommended conditions.
Conditions to avoid	Extremes of temperature, not greater than 50°C or less than -30°C.
Incompatible Materials	Avoid storage with corrosive liquids which may affect cylinder integrity. Keep segregated from toxic and flammable gases. Keep away from other chemicals which may be affected by cylinders in an emergency.
Hazardous Decomposition Products	Decomposition may produce toxic fumes of hydrogen chloride, metal oxides and phosphorous oxides.
Hazardous Reactions	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects

Acute/Chronic Toxicity	<p>Not classified as acutely toxic by any route of exposure.</p> <p>Inhalation of atmospheres with <19.5°C can cause asphyxiation, symptoms of which may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and finally, convulsions, coma and death.</p>				
	Ingredient	Oral LD50	Inhalation LC50	Dermal LD50	
	-	-	-	-	
Skin Contact	<p>Not classified as causing skin irritation.</p> <p>Physical damage in the form of cold burns or frostbite may occur if skin comes into contact with excessive amounts of released product in liquid form.</p>				
Eye Contact	<p>Not classified as causing eye irritation.</p> <p>Physical damage may occur if product is released directly into the eye.</p>				
Sensitisation - Respiratory/Skin	Not classified as a skin or respiratory sensitiser.				
Mutagenicity	Not classified as a mutagen.				
Carcinogenicity	Not classified as a carcinogen.				
Reproductive	Not classified as a reproductive toxin.				
STOT - Single Exposure	Not classified as causing organ damage from single exposure.				
STOT - Repeated Exposure	Not classified as causing organ damage from repeat exposure.				
Aspiration	Not classified as an aspiration hazard.				

SAFETY DATA SHEET



SDS Version Number: 1.0
SDS Version Date: 17/04/2018

12. ECOLOGICAL INFORMATION


	Ingredient	Fish	Crustacea	Algae / Aquatic Plants	
Ecotoxicity	Not Applicable	-	-	-	
Persistence and Degradability	Not Applicable				
Mobility	Not Applicable				
Other Adverse Effects	None				
Bioaccumulation Potential	Not Applicable				

SAFETY DATA SHEET

13. DISPOSAL CONSIDERATIONS

Disposal methods (including container disposal)	Ensure cylinders are gas-free before sending for recycling or disposal. To ensure cylinder is empty: Take to a well ventilated area. Close the valve by turning clockwise. Unscrew the nozzle from the cylinder by hand or using a wrench. Open valve by turning counter-clockwise and releasing any remaining pressure. Cylinder may now be recycled at any steel recycling centre or disposed of in an authorised landfill.
Special precautions for landfill or incineration	Cylinders may explode if incinerated with residual contents due to gas expansion.

14. TRANSPORT INFORMATION

Regulation	UN Number	Proper Shipping Name	DG Class	Packing Group	Label	Additional Information
ADG	1046	HELIUM, COMPRESSED	2.2	None Allocated		Limited Quantity - 120ml
IMDG	1046	HELIUM, COMPRESSED	2.2	None Allocated		EMS Number - F-C, S-V
IATA	1046	HELIUM, COMPRESSED	2.2	None Allocated		ERG code - 2L

15. REGULATORY INFORMATION

Poisons Schedule (Australia only)	Not Scheduled
APVMA Status	Not Applicable
TGA Status	Not Applicable
AICS Status	All components of this product are listed on the AICS or exempt.

16. OTHER INFORMATION

SDS Version Number	1.0
SDS Version Date	17/04/2018
Reason for issue	New Product

Key/Legend to Abbreviations and Acronyms used in the SDS:

Abbreviation/Acronym	Meaning
ADG	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
AS	Australian Standard (as issued by Standards Australia)
ASCC	Australian Safety and Compensation Council
DG ERG Code	Dangerous Goods Emergency Response Guidebook Code. The Emergency Response Guidebook is used by first responders (e.g. firefighters, police officers and ambulance personnel) when responding to a transportation emergency involving hazardous materials.
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD ₅₀	The median lethal toxicological dose, LD ₅₀ is an abbreviation for "Lethal Dose, 50%" of a toxic substance. This is the dose required to kill half the members of a tested population.
NOHSC	National Occupational Health and Safety Commission
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit - A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TGA	Therapeutic Goods Administration
TLV	Threshold Limit Value - TLV is a proprietary name registered by the American Conference of Governmental Industrial Hygienists (ACGIH) and refers to airborne concentrations of substances or levels of physical agents to which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.
TWA	Time Weighted Average - The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
UN Number	UN numbers are four-digit numbers that identify hazardous substances, and articles (such as explosives, flammable liquids, toxic substances, etc.) in the framework of international transport.

This SDS has been prepared by SGS from current technical data and summaries, at the date of issue, their best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the home or workplace.

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End of SDS