SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name
Helium, compressed.
Trade name
Balloon Gas
EC No (from EINECS): 231-168-5
CAS No: 7440-59-7
Index Nr.
Chemical formula
He
REACH Registration number

1.2. Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
Industrial and professional. Perform risk assessment prior to use.
Uses advised against
Do not breathe the gas. Inhalation of helium may cause asphyxiation followed by death.

1.3. Details of the supplier of the safety data sheet
Company identification
Adams Gas, 2 Bath Road, Margate, Kent, CT9 1SL
E-Mail Address
sales@adamsgas.co.uk

1.4. Emergency telephone number
Emergency phone numbers (24h): 01843 220596

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification acc. to Regulation (EC) No 1272/2008/EC (CLP/GHS)
Press. Gas (Compressed gas) - Contains gas under pressure; may explode if heated.
Not classified as hazardous to health. Asphyxiant in high concentrations.
Risk advice to man and the environment
In high concentrations may cause asphyxiation. Compressed gas.

2.2. Label elements
- Labelling Pictograms
- Signal word
Warning
- Hazard Statements
H280 Contains gas under pressure; may explode if heated.
EIGA-As Asphyxiant in high concentrations.
- Precautionary Statements
Precautionary Statement Prevention
None.
Precautionary Statement Response
None.
Precautionary Statement Storage
P403 Store in a well-ventilated place.
Precautionary Statement Disposal
None.

2.3. Other hazards
None.

SECTION 3: Composition/information on ingredients
Substance / Mixture: Substance.

3.1. Substances
Helium, compressed.
CAS No: 7440-59-7
Index Nr.: -
EC No (from EINECS): 231-168-5
REACH Registration number:
Contains no other components or impurities which will influence the classification of the product.

3.2. Mixtures
Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures
First Aid General Information:
Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
First Aid Inhalation:
Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
First Aid Skin / Eye:
Adverse effects not expected from this product.
First Aid Ingestion:
Ingestion is not considered a potential route of exposure.

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.

4.3. Indication of any immediate medical attention and special treatment needed
None.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
All known extinguishants can be used.

5.2. Special hazards arising from the substance or mixture Specific hazards
Exposure to fire may cause containers to rupture/explode. Hazardous combustion products
None.

5.3. Advice for fire-fighters
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 self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation.

6.2. Environmental precautions
Try to stop release.

6.3. Methods and material for containment and cleaning up
Ventilate area.

6.4. Reference to other sections
See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Suck back of water into the container must be prevented. Use only properly specified equipment which is suitable for this product. Its supply pressure and temperature. Contact your gas supplier if in doubt. Refer to supplier's handling instructions. Do not allow back feed into the container. Only experienced and properly instructed persons should handle gases under pressure. Protect cylinders from physical damage; do not drag, roll, slide or drop. Never use direct flame or electrical heating devices to raise the pressure of a container. 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 placed in a container stand and is ready for use. Ensure the complete gas system has been (or is regularly) checked for leaks before use. If user experiences any difficulty operating cylinder 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. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment. Keep container valve outlets clean and free from contaminates particularly oil and water. Never attempt to transfer gases from one cylinder/container to another. Do not smoke while handling product. The substance must be handled in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities
Keep container below 50 °C in a well-ventilated place. Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent falling over. Stored containers should be periodically checked for general conditions and leakage. Container valve guards or caps should be in place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from ignition sources (including static discharges). Keep away from combustible materials.

7.3. Specific end use(s)
None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No occupational exposure limit.

8.2. Exposure controls
Appropriate engineering controls
Product to be handled in a closed system. Oxygen detectors should be used when asphyxiating gases may be released. The substance must be handled in accordance with good industrial hygiene and safety procedures. Consider work permit system e.g. for maintenance activities. Systems under pressure should be regularly checked for leakages. Provide adequate general or local ventilation.

Personal protective equipment
Eye and face protection
Wear eye protection to EN 166 when using gases.

Skin protection
Other protection
Wear leather safety gloves and safety shoes when handling cylinders.

Respiratory protection
Not required

Thermal hazards
Not required

Environmental Exposure Controls
Specific risk management measures are not required beyond good industrial hygiene and safety procedures. Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
General information
Appearance/Colour: Colourless gas. Odour: None.
Melting point: -272.2 °C
Boiling point: -269 °C
Flash point: Not applicable for gases and gas mixtures.
Flammability range: Non-flammable.
Vapour Pressure 20 °C: Not applicable.
Relative density, gas: 0.14
Solubility in water: 1.5 mg/l
Auto ignition temperature: Not applicable.

Explosive properties:
Explosive acc. EU legislation: Not explosive.
Explosive acc. transp. reg.: Not explosive.
Oxidising properties: Not applicable.
Molecular weight: 4 g/mol
Critical temperature: -268 °C
Relative density, liquid: 0.12

9.2. Other information
None.
10. Reactivity

Unreactive under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

No reaction with any common materials in dry or wet conditions.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. Information on toxicological effects

General

No known toxicological effects from this product.

12.1. Toxicity

No ecological damage caused by this product.

12.2. Persistence and degradability

Not applicable.

12.3. Bio accumulative potential

Not applicable.

12.4. Mobility in soil

The substance is a gas, not applicable.

12.5. Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6. Other adverse effects

No ecological damage caused by this product.

13.1. Waste treatment methods

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

EWC Nr. 16 05 05

14.1. UN number

1046

14.2. UN proper shipping name

Helium, compressed

14.3. Transport hazard class(es)

Class: 2
Classification Code: 1A
Labels: 2.2

14.4. Packing group (Packing Instruction)

P200

14.5. Environmental hazards

None.

14.6. Special precautions for user

None.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

14.1. UN number

1046

14.2. UN proper shipping name

Helium, compressed

14.3. Transport hazard class(es)

Class: 2.2
Labels: 2.2

14.4. Packing group (Packing Instruction)

P200

14.5. Environmental hazards

None.

14.6. Special precautions for user

None.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.
correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Seveso Directive 96/82/EC: Not covered.

15.2. Chemical safety assessment
A CSA does not need to be carried out for this product.

SECTION 16: Other information

Ensure all national/local regulations are observed. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Advice
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. Details given in this document are believed to be correct at the time of going to press.

Further information
Note: When using this document care should be taken, as the decimal sign and its position complies with rules for the structure and drafting of international standards, and is a comma on the line. As an example 2,000 is two (to three decimal places) and not two thousand, whilst 1,000 is one thousand and not one (to three decimal places).

End of document