



M A T E R I A L S A F E T Y D A T A S H E E T

<u>Identification of substance</u> He	Trade Name Helium Balloon Grade Diving Grade Lab Grade	Manufacturer: OXYGASES LLC. PO Box - 89968, AL Ghail Industrial Zone, R.A.K, U.A.E. <small>EMERGENCY TELEPHONE NUMBER +971 7 2216029, +971 50 235 3677</small>
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General

Helium is a highly inert gas found in nature in limited quantities. It is colorless, odorless, Non-flammable and non-toxic. Liquid Helium is the coldest known substance. Special Transportation and storage equipment is required for minimizing losses of product.

Applications

Helium is the second element in the periodic table and owing to its non-flammable Nature and lightweight, replaces Hydrogen in the metrological applications. It is a Critical element in many applications and is used in numerous other applications in line With its highly inert and stable characteristics. Major applications are as under:

- Magnetic Resonance Imaging (MRI)
- Deep Sea Diving
- Fiber Optics
- Space Exploration
- Balloon Filling
- Analytical Applications
- Research and Development
- Leak Detection
- Lifting
- Welding



Hazards Identifications

Hazard description:

High pressure liquid and gas can cause rapid suffocation. Do not breathe gas. Self-contained breathing apparatus may be required by rescue workers.

Handling and Storage

Never attempt to lift a cylinder by its valve protection cap. Never insert an object (e.g. Wrench, pry, bar, etc.) into valve cap openings. Use an adjustable strap wrench to remove over-tight or rusted caps.

Use a suitable hand truck for cylinder movement. Use a first-in, first-out inventory system to prevent full containers from being stored for long periods of time. Keep container below 50°C in a well ventilated place.

Prevention:

Keep / Store away from clothing / combustible materials.
Keep reduction valves free from grease and oil.

Response:

In case of fire: Stop leak if safe to do so.

Handling and Storage:

Use no oil or grease. Do not store in a confined space.

Open valve slowly to avoid pressure shock.

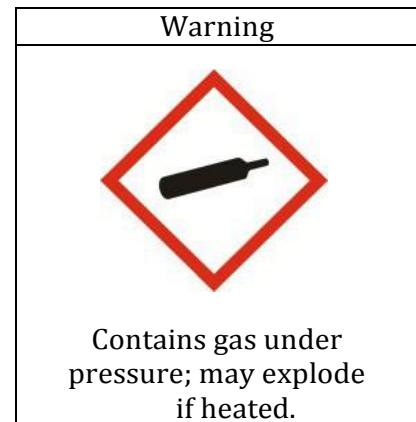
Post "No Smoking" AND "No Open Flames" signs in the storage area.

Do not drop, tip or roll containers on their side.

Keep container below 50°C in a well ventilated place.

Never allow any unprotected part of the body to touch un-insulated pipes or vessels which contain cryogenic fluids.

Protect from sunlight. Store in a well-ventilated place.



**First Aid Measures:**

After inhalation : Supply fresh air; consult doctor in case of complaints.

After skin contact : Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for at least 15minutes under running water.

Then consult a doctor.

After swallowing: Not applicable

Fire Fighting Measures:

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective Equipment:

Wear self-contained respiratory protective device.

Transport Information

DOT Hazard Class	Non Flammable 2.2
DOT Identification Number	UN1046
CAS No	7440-59-7
DOT / IMO Name	Helium Compressed
Shipping Label	Nonflammable Gas



**Physical and Chemical Properties**

Form	Gaseous
Appearance	Colour less
Odor	Odorless
Physical Pressure	Gas
Vapour Pressure	N/Ap
Vapor Density (Air = 1)	0.14
Boiling Point	-268.93°C
Solubility in water	1.5mg/L
Specific Gravity (H ₂ O =1)	Gas
Evaporation Rate	Gas
Odor Threshold	None