

# MATERIAL SAFETY DATA SHEET (MSDS)

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Helium

Product Use: Industrial Gas

Company Name: Indo-Ghana Industries Ltd

Address: B-6158 Dadeban Rd. North Industrial Area, Accra, Ghana

Emergency Contact: 054 431 3876

Telephone Number: 054 431 3876

Date of Preparation: 12/9/2023

## SECTION 2: HAZARD IDENTIFICATION

Helium is generally considered non-toxic, non-flammable, and non-reactive under normal conditions. However, improper handling, storage, or exposure to high concentrations can pose certain hazards.

### Emergency Overview:

- Colorless, odorless, and tasteless gas.
- Under high pressure, helium can displace oxygen, leading to asphyxiation in confined spaces.
- Not considered a fire or explosion hazard.

**Potential Health Effects:**

- Inhalation: Inhaling excessive helium can cause dizziness, nausea, and asphyxiation if oxygen levels are reduced.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name: Helium (He)

CAS Number: 7440-59-7

Percentage by Volume: 100%

**SECTION 4: FIRST AID MEASURES****Inhalation:**

- Move the affected person to fresh air immediately.
- If breathing difficulties persist, seek medical attention.

**Eye Contact:**

- Rinse eyes with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.

**Skin Contact:**

- Wash affected skin with soap and water. If irritation develops, seek medical attention.

**SECTION 5: FIRE-FIGHTING MEASURES**

Helium is not flammable and does not support combustion. No special fire-fighting measures are required for helium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### **In case of a helium gas leak:**

- Evacuate the area and restrict access.
- Ventilate the area to disperse the gas.
- Do not allow smoking, open flames, or sparks in the vicinity.
- Use appropriate protective equipment if trained to do so.

## SECTION 7: HANDLING AND STORAGE

### **Handling:**

- Use helium in well-ventilated areas.
- Ensure proper ventilation in confined spaces.
- Do not inhale helium directly from the cylinder.

### **Storage:**

- Store helium cylinders upright and secured to prevent tipping.
- Store away from sources of heat, open flames, and combustible materials.
- Keep cylinders in a cool, dry place.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Exposure Limits:**

- Occupational Exposure Limit (OEL): Not established for helium due to its inert nature.

### **Personal Protective Equipment:**

- Eye protection: Safety glasses or goggles.
- Skin protection: Nitrile or latex gloves.
- Respiratory protection: Not required under normal conditions.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state: Gas
- Color: Colorless
- Odor: Odorless
- Boiling Point:  $-268.93^{\circ}\text{C}$  ( $-452.07^{\circ}\text{F}$ )
- Melting Point:  $-272.2^{\circ}\text{C}$  ( $-457.96^{\circ}\text{F}$ )

## **SECTION 10: STABILITY AND REACTIVITY**

Helium is chemically inert and stable under normal conditions. It does not react with other substances.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Helium is not considered toxic under normal conditions of use. However, inhalation of high concentrations can lead to asphyxiation.

## **SECTION 12: ECOLOGICAL INFORMATION**

Helium is an inert gas and does not pose ecological hazards.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of helium cylinders in accordance with local, state, and national regulations for compressed gases.

### **SECTION 14: TRANSPORT INFORMATION**

Helium is classified as a non-hazardous gas for transportation.

### **SECTION 15: REGULATORY INFORMATION**

Consult local and national regulations for any specific requirements related to helium storage, handling, and transportation.

### **SECTION 16: OTHER INFORMATION**

This MSDS is provided for informational purposes only and is based on our current knowledge. It does not constitute a warranty or guarantee of product performance. Users should ensure safe handling, storage, and use of helium in accordance with applicable laws and regulations.

END OF MSDS