



MATERIAL SAFETY DATA SHEET

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Helium

MSDS Number: OKE002

Issue Date: 8/00

Revision: 7/09

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION - SECTION 1

Company Identification: ONEOK, Inc.
100 West Fifth Street
Tulsa, OK 74103

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT:

Call Chemtrec: (800) 424-9300

For additional non-emergency information, call: (888) 417-6275

Product Name: Helium

Synonym(s): Helium Compressed, Helium Gas, Helium-4

CAS Number: 7440-59-7

Chemical Formula: He

HAZARDS IDENTIFICATION - SECTION 2

Colorless gas, nonflammable.

Contact with rapidly expanding gases or liquids can cause frostbite.

This material is classified as hazardous under OSHA regulations.

The following information summarizes human experience and results of scientific investigations reviewed by health professionals for hazard evaluation of and development of Precautionary Measures and Occupational Control Procedures recommended in this document.

Primary Route of Entry: Inhalation. Asphyxia may result if oxygen level is reduced to less than 18%.

Medical Conditions Which Might be Aggravated: Acute or chronic respiratory conditions may be aggravated by overexposure to this gas.

Acute Exposure Effects:

- 1. Skin:** Blisters, frostbite.
- 2. Eyes:** Frostbite, blurred vision.
- 3. Inhalation:** Simple Asphyxiant, may cause nausea, vomiting, dizziness, tingling sensation, suffocation, convulsions, or coma.
- 4. Ingestion:** Frostbite, although ingestion is not a normal route of exposure for gases.

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COMPOSITION/ INFORMATION ON INGREDIENTS - SECTION 3

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% By Weight</u>
Helium	7440-59-7	100

Note: These analytical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

FIRST AID MEASURES - SECTION 4

Skin: Wash skin with plenty of soap and water for several minutes. In case of cold burn, immediately place affected area in warm water (105° F) and keep at this temperature until circulation returns. Get medical attention. If clothing becomes wet, drench individual with water and remove contaminated clothing if possible. Slowly warm affected area of skin.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if eye irritation persists.

Inhalation: If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Ingestion: No emergency care anticipated.

FIRE FIGHTING MEASURES - SECTION 5

Flash Point: Nonflammable

Method: N/A

Auto ignition Temperature: Nonflammable

Method: N/A

Combustibility: Nonflammable

Method: N/A

Flammable Limits in Air, % by Volume: LEL: Nonflammable UEL: Nonflammable

Extinguishing Media: Nonflammable

Special Fire Fighting Procedures:

Cool cylinders/pipelines and surroundings with water from a suitable distance. Excessive pressure may develop if exposed to fire, which may result in explosion, regardless of the content. Firefighters should wear proper protective equipment and a positive pressure self contained breathing apparatus.

Unusual Fire and Explosive Hazards: Nonflammable

ACCIDENTAL RELEASE MEASURES - SECTION 6

Material is lighter than air and freely dissipates. Ensure oxygen level stays above 18%.

HANDLING AND STORAGE - SECTION 7

Handle and store sealed gas cylinders in accordance with:

CGA P-1, Safe Handling of Compressed Gases in Containers

OSHA 1910.101

NFPA #55, Standard for the Storage, Use and Handling of Compressed and Liquefied Gases in Portable Cylinders

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EXPOSURE CONTROLS/PERSONAL PROTECTION - SECTION 8

<u>Chemical Name</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH TLV (ppm)</u>	<u>Other (ppm)</u>
Helium	None	None	Simple Asphyxiant

Eye Protection: Wear safety glasses or when using a respirator make sure the mask provides splash and impact protection.

Skin Protection: Wear appropriate gloves when handling cylinders.

Respiratory Protection: Positive pressure, full face, air supplied respirator should be used for work within a confined space.

Ventilation: Ensure oxygen content is greater than 18%.

PHYSICAL AND CHEMICAL PROPERTIES - SECTION 9

Appearance: Colorless gas

Specific Gravity: Gas

Flash Point: Nonflammable

Auto ignition Temperature: Nonflammable

Flammable Limits in Air, % by Volume: LEL: Nonflammable UEL: Nonflammable

Solubility in Water (wt. %): Negligible

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

STABILITY AND REACTIVITY - SECTION 10

Stability: Stable under normal conditions.

Incompatibility: None.

Hazardous Decomposition Products: None, nonflammable.

Hazardous Polymerization: Polymerization will not occur.

TOXICOLOGICAL INFORMATION - SECTION 11

Toxicity: Nontoxic

Teratogenicity: Not established

Reproductive Toxicity: Not established

Mutagenicity: Not established

Synergistic Products: Not established

Sensitization to Product: Not established

Carcinogenicity: Contains > 0.1% by weight of a material listed as a potential carcinogen by:

NTP
No

IARC
No

OSHA
No

Other Chronic Effects: Not Determined

Signs and Symptoms of Overexposure: May cause nausea, vomiting, dizziness, or tingling sensation.

ECOLOGICAL INFORMATION - SECTION 12

No data is available on the adverse effects of this material on the environment. Neither COD nor BOD data are available.

DISPOSAL CONSIDERATIONS - SECTION 13

Dispose of container and unused contents in accordance with federal, state and local requirements.

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TRANSPORT INFORMATION - SECTION 14

DOT

Proper Shipping Name: Helium, compressed

Hazard Class/I.D. No./Packing Group: 2.2, UN 1046

Label: Nonflammable Gas

I.M.O.

Proper Shipping Name: Helium, compressed

Hazard Class/I.D. No./Packing Group: 2.2, UN 1046

Label: Nonflammable Gas

I.C.A.O./I.A.T.A.

Proper Shipping Name: Helium, compressed

Hazard Class/I.D. No./Packing Group: 2.2, UN 1046

Label: Nonflammable Gas

REGULATORY INFORMATION - SECTION 15

TSCA Inventory: Yes

Reportable Quantity (RQ) Under US EPA CERCLA Regulations: Not listed

SARA Hazard Notification Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): No

Section 313 Toxic Chemical(s): Not listed

Hazardous Chemical(s) Under OSHA Hazard Communication Standard: Yes

OTHER INFORMATION - SECTION 16

Hazard Ratings:

NFPA

Health -- 0

Fire -- 0

Reactivity -- 0

Specific Hazard -- N/A

HMIG

Health -- 0

Flammability -- 0

Reactivity -- 0

PPE -- None

To the best of our knowledge, the information contained herein is accurate. However, neither ONEOK, Inc. nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.