

US BUREAU OF MINES, HELIUM OPN -- HELIUM

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MSDS Safety Information  
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FSC: 6830  
NIIN: 00-660-0026  
MSDS Date: 08/03/1992  
MSDS Num: BVWYX  
Product ID: HELIUM  
MFN: 01  
Responsible Party  
Cage: 0JBD1  
Name: US BUREAU OF MINES, HELIUM OPNS  
Address: 1100 S FILLMORE ST  
City: AMARILLO TX 79101-4318  
Info Phone Number: 806-376-2638  
Emergency Phone Number: 806-376-2638  
Review Ind: Y  
Published: Y

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Contractor Summary  
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Cage: 0JBD1  
Name: US BUREAU OF MINES, HELIUM OPNS  
Address: 1100 S FILLMORE ST  
City: AMARILLO TX 79101-4318  
Phone: 806-376-2638

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Item Description Information  
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Item Name: HELIUM, TECHNICAL  
Specification Number: BB-H-1168A  
Type/Grade/Class: GRADE A  
Unit of Issue: CF  
UI Container Qty: 0  
Type of Container: UNKNOWN

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Ingredients  
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Cas: 7440-59-7  
RTECS #: MH6520000  
Name: HELIUM  
% Wt: >99  
Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED

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Health Hazards Data  
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LD50 LC50 Mixture: UNKNOWN  
Route Of Entry Inds - Inhalation: YES  
Skin: NO  
Ingestion: NO  
Carcinogenicity Inds - NTP: NO  
IARC: NO

OSHA: NO

Effects of Exposure: NON-TOXIC. SIMPLE ASPHYXIANT. IN CLOSED AREAS  
NON-FLAMMABLE GAS CAN DISPLACE OXYGEN. IF ATMOSPHERIC OXYGEN CONTENT DROPS  
BELOW 18% ASPHYXIATION CAN OCCUR.

Signs And Symptions Of Overexposure: SYMPTOMS CAN INCLUDE PANTING, GASPING,  
FAST PULSE, CLUMSINESS, BLUIISH FINGERNAILS AND/OR LIPS, CONFUSION,  
DIZZINESS,

FATIGUE, NAUSEA, VOMITING, COLLAPSE AND CONVULSIONS.

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MANUFACTURER.

First Aid: INHALATION- (CAUTION! RESCUERS MUST SEE TO THEIR OWN SAFETY. USE  
SELF-CONTAINED BREATHING EQUIPMENT TO ENTER AREAS OF LOW OXYGEN.) REMOVE  
VICTIM TO FRESH AIR. QUICKLY RESTORE OR SUPPORT BREATHING AS NEEDED. GIVE  
OXYGEN IF AVAILABLE. GET MEDICAL ATTENTION FOR VICTIM.

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Handling and Disposal  
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Spill Release Procedures: CLEAR PEOPLE FORM AREA UNTIL A SAFE OXYGEN LEVEL  
CAN

BE ASSURED. NOTIFY SAFETY PERSONNEL IMMEDIATELY. EMERGENCY WORKERS NEED  
SELF-CONTAINED BREATHING APPARATUS. PAINT SOAP SOLUTION AROUND SUSPECTED LE  
AK TO SEE IF BUBBLES FORM, INDICATING ALEAK.

Waste Disposal Methods: MOVE LEAKING CYLINDER OUTDOORS OR TO AN EXHAUST HOOD  
WITH GOOD FORCED VENTILATION. ALLOW GAS O VENT AT A MODERATE RATE. TAG  
CYLINDER AS DEFECTIVE AND MARK DEFECT. WHEN EMPTY CLOSE VALVE AND RETURN TO  
SUPPLIER. FOLLOW ALL STATE AND LOCAL REGULATIONS.

Handling And Storage Precautions: STORE IN A COOL, DRY, WELL-VENTILATED AREA  
WITH LOW RISK OF FIRE AND AWAY FROM CONBUSTIBLE OR CORROSIVE CHEMICALS.

Other Precautions: PROTECT CONTAINERS FORM PHYSICAL DAMAGE AND FROM HEAT OVER  
125F. COVER VALVE WITH CAP WHEN NOT IN USE. PROTECT COMPRESSED GAS  
CYLINDERS

AGAINST FALLING, BUMPING OR SUDDEN BLOWS. WEAR SAFETY SHOES WHEN HANDLING  
COMPRESSED GAS CYLINDERS.

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Fire and Explosion Hazard Information  
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Flash Point Text: NONFLAMMABLE

Extinguishing Media: USE EXTINGUISHERS SUITED TO SURROUNDING FIRE.

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Control Measures  
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Respiratory Protection: PROVIDE AIR-SUPPLIED OR SELF-CONTAINED BREATHING  
EQUIPMENT FOR WORKERS IN EMERGENCY OR NON-ROUTINE SITUATIONS WHERE OXYGEN  
LEVEL IS UNSAFE. USE A SAFETY LINE AND A STAND-BY WORKER WHEN A WORKER WITH  
A

RESPIRATOR MUST ENTER AN EMERGENCY AREA

Ventilation: MAINTAIN AT LEAST 19% OXYGEN IN AIR.

Protective Gloves: NONE NORMALLY REQUIRED.

Eye Protection: NONE NORMALLY REQUIRED.

Other Protective Equipment: SAFETY SHOES ARE RECOMMENDED FOR HANDLING GAS  
CYLINDERS.

Work Hygienic Practices: NONE NORMALLY REQUIRED.

Supplemental Safety and Health: CHECK FOR LEAKS IN COMPRESSED GAS EQUIPMENT  
BEFORE USE IN CONFINED SPACES.

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Physical/Chemical Properties  
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HCC: G3

B.P. Text: -452F,-269C  
M.P/F.P Text: -458F,-272C  
Vapor Density: 0.138  
Evaporation Rate & Reference: GAS  
Appearance and Odor: NO COLOR, NO ODOR, NO TASTE.

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Reactivity Data

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Stability Indicator: YES  
Stability Condition To Avoid: HEAT, SPARKS AND OPEN FLAMES.  
Materials To Avoid: NONE  
Hazardous Decomposition Products: NONE  
Hazardous Polymerization Indicator: NO

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Toxicological Information

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Ecological Information

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MSDS Transport Information

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Regulatory Information

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Other Information

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Transportation Information

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Responsible Party Code: 0JBD1  
Trans ID NO: 81028  
Product ID: HELIUM  
MSDS Prepared Date: 08/03/1992  
Review Date: 12/05/1994  
MFN: 1  
Net Unit Weight: UNKNOWN  
Multiple KIT Number: 0  
Review IND: Y  
Unit Of Issue: CF  
Container QTY: 0  
Type Of Container: UNKNOWN  
Additional Data: NONE

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Detail DOT Information

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DOT PSN Code: GZR  
DOT Proper Shipping Name: HELIUM, COMPRESSED  
Hazard Class: 2.2  
UN ID Num: UN1046  
Label: NONFLAMMABLE GAS  
Packaging Exception: 306  
Non Bulk Pack: 302  
Bulk Pack: 302,314  
Max Qty Pass: 75 KG  
Max Qty Cargo: 150 KG

Vessel Stow Req: A  
Water/Ship/Other Req: 85

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Detail IMO Information  
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IMO PSN Code: HWT  
IMO Proper Shipping Name: HELIUM, COMPRESSED  
IMDG Page Number: 2144  
UN Number: 1046  
UN Hazard Class: 2(2.2)  
IMO Packaging Group: -  
Subsidiary Risk Label: -  
EMS Number: 2-04  
MED First Aid Guide NUM: NON

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Detail IATA Information  
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IATA PSN Code: NCJ  
IATA UN ID Num: 1046  
IATA Proper Shipping Name: HELIUM, COMPRESSED  
IATA UN Class: 2.2  
IATA Label: NON-FLAMMABLE GAS  
Packing Note Passenger: 200  
Max Quant Pass: 75KG  
Max Quant Cargo: 150KG  
Packing Note Cargo: 200

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Detail AFI Information  
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AFI PSN Code: NCJ  
AFI Proper Shipping Name: HELIUM, COMPRESSED  
AFI Hazard Class: 2.2  
AFI UN ID NUM: UN1046  
Special Provisions: P5  
Back Pack Reference: A6.3, A6.6

=====  
HAZCOM Label  
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Product ID: HELIUM  
Cage: 0JBD1  
Company Name: US BUREAU OF MINES, HELIUM OPNS  
Street: 1100 S FILLMORE ST  
City: AMARILLO TX  
Zipcode: 79101-4318  
Health Emergency Phone: 806-376-2638  
Label Required IND: Y  
Date Of Label Review: 12/05/1994  
Status Code: C  
Label Date: 12/05/1994  
Origination Code: F  
Signal Word: WARNING  
Respiratory Protection IND: YES  
Health Hazard: Moderate  
Contact Hazard: None  
Fire Hazard: None  
Reactivity Hazard: None  
Hazard And Precautions: NON-TOXIC. SIMPLE ASPHYXIANT. IN CLOSED AREAS

NON-FLAMMABLE GAS CAN DISPLACE OXYGEN. IF ATMOSPHERIC OXYGEN CONTENT DROPS BELOW 18% ASPHYXIATION CAN OCCUR. STORE IN A COOL, DRY, WELL-VENTILATED AREA

WITH LOW RISK OF FIRE AND AWAY FROM COMBUSTIBLE OR CORROSIVE CHEMICALS. FIRST AID: INHALATION- (CAUTION! RESCUERS MUST SEE TO THEIR OWN SAFETY. USE SELF-CONTAINED BREATHING EQUIPMENT TO ENTER AREAS OF LOW OXYGEN.) REMOVE VICTIM TO FRESH AIR. QUICKLY RESTORE OR SUPPORT BREATHING AS NEEDED. GIVE OXYGEN IF AVAILABLE. GET MEDICAL ATTENTION FOR VICTIM.

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