

UNION CARBIDE CORP, LINDE DIV -- HELIUM -- 6830-00-397-2793

===== Product Identification =====

Product ID:HELIUM

MSDS Date:09/01/1985

FSC:6830

NIIN:00-397-2793

MSDS Number: BGSPZ

=== Responsible Party ===

Company Name:UNION CARBIDE CORP, LINDE DIV

Address:39 OLD RIDGEBURY RD

City:DANBURY

State:CT

ZIP:06817-0001

Info Phone Num:304-744-3487

Emergency Phone Num:304-744-3487

CAGE:36346

=== Contractor

Identification ===

Company Name:UNION CARBIDE CORP LINDE DIV

Address:39 OLD RIDGEBURY RD

Box:City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Phone:800-822-4357; 304-744-3487

CAGE:36346

===== Composition/Information on Ingredients =====

Ingred Name:HELIUM

CAS:7440-59-7

RTECS #:MH6520000

Fraction by Wt: 100%

OSHA PEL:SIMPLE ASPHYXIAN

ACGIH TLV:SIMPLE ASPHYXIAN

===== Hazards Identification =====

LD50 LC50 Mixture:SIMPLE ASPHYXIAN

Routes o

f Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: ASPHYXIAN. MODERATE
CONCENTRATIONS MAY CAUSE HEADACHE, DROWSINESS, DIZZINESS,
EXCITATION, EXCESS SALIVATION, VOMITING AND UNCONSCIOUSNESS.
CHRONIC: NO EVIDENCE OF ADVERSE EFFECTS FROM AVAILABL E
INFORMATION.

Explanation of Carcinogenicity:NOT LISTED.

Effects of Overexposure:INHALATION: ASPHYXIAN. MODERATE CONCENTRATIONS
MAY CAUSE HEADAC

HE, DROWSINESS, DIZZINESS, EXCITATION, EXCESS
SALIVATION, VOMITING AND UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:OVEREXPOSURE IS UNLIKELY TO
AGGRAVATE EXISTING MEDICAL CONDITIONS.

===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION
IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. CALL A
PHYSICIAN. EYES:FLUSH WITH WATER. SKIN:WASH WITH SOAP AND WATER.
NOT TO PHY SICIAN:

THERE IS NO SPECIFIC ANTIDOTE. THIS PRODUCT IS
INERT. TREATMENT OF OVEREXPOSURE SHOULD BE DIRECTED AT THE CONTROL
OF SYMPTOMS AND THE CLINICAL CONDITION.

===== Fire Fighting Measures =====

Flash Point:NONE

Autoignition Temp:Autoignition Temp Text:2 LBS

Extinguishing Media:HELIUM CANNOT CATCH FIRE. USE MEDIA APPROPRIATE FOR
SURROUNDING FIRE.

Fire Fighting Procedures:EVACUATE ALL PERSONNEL FROM DANGER AREA.
IMMEDIATELY DELUGE CONTAINERS WITH WAT
ER SPRAY FROM MAXIMUM

DISTANCE UNTIL COOL, THEN MOVE CONTAINERS AWAY FROM AREA.

Unusual Fire/Explosion Hazard:HELIUM CANNOT CATCH FIRE. CONTAINER MAY
RUPTURE DUE TO HEAT OF FIRE. KEEP TEMPERATURE BELOW 125F. MOST
CONTAINERS HAVE A PRESSURE RELIEF VALVE TO VENT CONTENTS.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM DANGER AREA. USE
SELF-CONTAINED BREATHING APPARATUS WHERE NEEDED. SHUT OFF LEAK IF
WIT

HOUT RISK. VENTILATE AREA OF LEAK OR MOVE LEAKING CONTAINER TO WELL-VENTILATED AREA. TEST AREA FOR SUFFICIENT OXYGEN PRIOR TO ENTRY.

Neutralizing Agent:NONE

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===== Handling and Storage =====

Handling and Storage Precautions:NEVER WORK ON A PRESSURIZED SYSTEM. IF THERE IS A LEAK, CLOSE THE CYLINDER VALVE, BLOW DOWN THE SYSTEM BY VENTING TO A SAFE PLACE, THEN REPAIR LEAK.

Other Precautions:CAUTION:HIGH PRESSURE GAS. USE PIPING & EQUIPMENT ADEQUATELY DESIGNED TO WITHSTAND PRESSURES TO BE ENCOUNTERED. CAN CAUSE RAPID SUFFOCATION DUE TO OXYGEN DEFICIENCY. STORE & USE WITH ADEQUATE VENTILATION. CLOSE VALVE WHEN NOT IN USE/EMPTY.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR IN ACCORDANCE WITH OSHA 29 CFR 1910.134.

Ventilation:LOCAL EXHAUST PREFERRED, MECHANICAL ACCEPTABLE.

Protective Gloves:WORK GLOVES FOR CYLINDER HANDLING.

Eye Protection:SELECT GOGGLES I/A/W OSHA 29 CFR1910.133

Other Protective Equipment:METATARSEL SHOES FOR CYLINDER HANDLING (OSHA 29 CFR1910.132 & 133).

Work Hygienic Practices:NONE

Supplemental Safety and Health
DO NOT STRIKE ARC ON CYLINDER. FOR SAFETY INFORMATION ON GENERAL HANDLING OF COMPRESSED GAS CYLINDERS, OBTAIN A COPY OF PAMPHLET P-1, "SAFE HANDLING OF COMPRESSED GASES IN CONTAINERS" FROM THE COMPRESSED GAS ASSOCIATION, INC. 1235 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA 22202.

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===== Physical/Chemical Properties =====

HCC:G3

Boiling Pt:B.P. Text:-452F,-269C

Vapor Pres:GAS

Vapor Density:0.138

Spec Gravity:GAS

Solubility in Water:NEGLIGIBLE

Appearance and Odor:COLORLESS GAS AT NORMAL TEMPERATURE AND PRESSURE; ODORLESS.

Percent Volatiles by Volume:100

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE CURRENTLY KNOWN. HELIUM IS CHEMICALLY INERT.

Stability Condition to Avoid:HIGH TEMPERATURE

TEMPERATURES ABOVE 125F.

Hazardous Decomposition Products:NONE

===== Disposal Considerations =====

Waste Disposal Methods:SLOWLY RELEASE INTO ATMOSPHERE OUTDOORS. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

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