

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: ASPHYXIANT. 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: ASPHYXIANT. 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

=====  
===== 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.

=====  
===== 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:SEL

ECT 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.

=====  
===== 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

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

Stability Indicator/Materials to Avoid:YES

NONE CURRENTLY KNOWN. HELIUM IS CHEMICALLY INERT.

Stability Condition to Avoid:HIGH TE

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.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the

Department

of Defense. The United States of America in no manner whatsoever,

expressly or implied, warrants this information to be accurate and

disclaims all liability for its use. Any person utilizing this

document should seek competent professional advice to verify and

assume responsibility for the suitability of this information to their

particular situation.