

UNION CARBIDE CORP, LINDE DIV. -- HELIUM -- 6830-01-008-3431

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

Product ID:HELIUM

MSDS Date:09/01/1985

FSC:6830

NIIN:01-008-3431

MSDS Number: BGSQX

=== 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

=== Contracto

r 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

of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: ASPHYXANT. 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: ASPHYXANT. MODERATE CONCENTRATIONS  
MAY CAUSE HEADA

CHE, 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.  
NOTE TO PHYSIC

IAN: 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

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 WATER SPRAY FROM MAXIMUM  
DISTANCE UNTIL CO

OL, 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  
WITHOUT RISK. VENTILATE AREA OF LEAK OR MOVE L

EAKING CONTAINERS 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 T  
O BE ENCOUNTERED. CAN  
CAUSE RAPID SUFFOCATION DUE TO OXYGEN DEFICIENCY. STORE & USE WITH  
ADEQUATE VENTILAT ION. 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:SELECT GOGGLES I/A/W OSHA 29 CFR1910.133

Oth

er Protective Equipment:METATARSEL SHOES FOR CYLINDER HANDLING (OSHA  
29 CFR 1910.132 & 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  
COMPRES SED 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 TEMPERATURES ABOVE 125F.

Hazardous Decompo

sition 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 REGULATION S.

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