

HELIUM, (CRYOGENIC LIQUID)

MSDS Number

BHDRZ

National Stock Number

6830-00-660-0026

Product Name

HELIUM, (CRYOGENIC LIQUID)

Manufacturer

UNION CARBIDE CORP

Product Identification

Product ID:HELIUM, (CRYOGENIC LIQUID)

MSDS Date:06/19/1989

FSC:6830

NIIN:00-660-0026

MSDS Number: BHDRZ

Responsible Party

UNION CARBIDE CORPORATION

39 OLD RIDGEBURY ROAD

DANBURY , CT 06817-0001

US

Emergency Phone: 1-800-822-4357 CANADA 514-640-6400

Info Phone: ROUTINE INFO CONTACT LOCAL SUPPLIER

Cage: 36346

Contractor

UNION CARBIDE CORP LINDE DIV

DANBURY, CT 06817-0001

US

800-822-4357; 304-744-3487

Cage: 36346

Ingredients

HELIUM

CAS: 7440-59-7

RTECS: NH6520000

Fraction By Weight: 100%

OSHA PELNONE ESTABLISHED

ACGIH TLV: NONE ESTABLISHED

Hazards

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:SWALLOWING: FROSTBITE OF THE LIPS AND MOUTH MAY RESULT FROM CONTACT WITH LIQUID INHALATION: ASPHYXANT.

MODERATE CONCENTRATIONS MAY CAUSE HEADACHE/DROWSINESS/ DIZZINESS/EXCITATION/EXCESS SALIVATION/V OMITING/UNCONSCIOUSNESS.

SKIN: LIQUIDMAY CAUSE FROSTBITE. EYES: LIQUID MAY CAUSE FROSTBITE.

Effects of Overexposure:HELIUM IS AN ASPHYXANT. LACK OF OXYGEN CAN CAUSE DEATH.

Medical Cond Aggravated by Exposure: A KNOWLEDGE OF THE AVAILABLE TOXICOLOGY INFORMATION AND OF THE PHYSICAL AND CHEMICAL PROPERTIES OF THE MATERIAL SUGGEST THAT OVEREXPOSURE IS UNLIKELY TO AGGRAVATE EXISTING MEDICAL CONDITIONS.

First Aid

First Aid: SWALLOWING: PROD A GAS AT NORMAL TEMP/PRESSURE. SKIN: FOR EXPOSURE TO LIQ, IMMEDIATELY WARM FROSTBITE AREA W/WARM WATER (NOT TO EXCEED 105F). WITH MASSIVE EXPOSURE REMOVE CLOTHING WHILE SHOWERING W/WARM WATER. GET MED ATTN. INHALATION: REMOVE TO FRESH AIR. GIVE CPR IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. GET MED ATTN. EYES: FLUSH THOROUGHLY W/WATER FOR 15 MIN. SEE A PHYSICIAN.

Fire Fighting

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

Fire Fighting Procedures: EVAC ALL PER FM DANGER AREA. IMMEDIATELY DELUGE CONT'S W/WATER SPRAY FM MAX DIST UNTIL COOL/MOVE CONT'S AWAY FM FIRE AREA IF W/O RISK. DO NOT DISCHARGE WATER INTO HEL.

Unusual Fire/Explosion Hazard: CLOSED CONT MAY RUPTURE FM FIRE HEAT. TO PREV IGNITION OF GREASE/OIL/OTHER COMBUSTIBLE MATLS ON LIQ HELIUM SUR, AIR CONDENSATION S/B KEPT FREE OF THESE MATLS.

Accidental Release

Spill Release Procedures: EVAC ALL PERSONNEL FM DANGER AREA. ALLOW SPILLED LIQ TO EVAP. SHUT OFF LEAK IF W/O RISK. MOVE LEAKING ASSEMBLY TO VENT'D AREA OR VENT AREA OF LEAK. USE SELF-CONTAINED BREATHING APPAR WHERE NEEDED. TEST AREA FOR SUFF OXY PRIOR TO PERMITTING RE-ENTRY.

Handling

Handling and Storage Precautions: CONTACT W/LIQ/COLD GAS-SEVERE FROSTBITE. VAPOR- SUFFOCATION. DO NOT STRIKE ARC/GROUND ON CONT'ER. CLOSE VALVE W/NOT IN USE/EMPTY. PROTECT FM DAMAGE. Other 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 THE LEAK. USE PIPING/EQUIP DESIGNED TO WITHSTAND PRESS/TEMPS. STORE/USE W/ADEQUATE VENTIL.

Exposure Controls

Respiratory Protection: SELECT IN ACCORDANCE WITH OSHA 29 CFR 19140.134. RESPIRATORS SHALL BE ACCEPTABLE TO MSHA AND NIOSH.

Ventilation: LOCAL EXHAUST-PREFERRED. MECHANICAL (GENERAL)-ADEQUATE. SPECIAL-NOT APPLICABLE. OTHER-NOT APPLICABLE.

Protective Gloves: LOOSE FITTING CRYOGENIC GLOVES.

Eye Protection: SELECT IAW OSHA 29 CFR 1910.133.

Other Protective Equipment: METAL ARSAL/HIGH-TOP SHOES/PROTECTIVE CLOTHING/CUFFLESS TROUSERS S/B WORN OUTSIDE SHOES/SEL IAW OSHA 29 CFR 1910.132/133.

Supplemental Safety and Health
NK

Chemical Properties

Boiling Pt: B.P. Text: -268.9C

Vapor Pres: GAS @ 20C

Vapor Density: 0.138 @ 21C

Spec Gravity: 0.147 @ -270.8C

Evaporation Rate & Reference: HIGH @ BUTYL ACETATE

Solubility in Water: NEGLIGIBLE

Appearance and Odor: COLORLESS, ODORLESS LIQUID

Percent Volatiles by Volume: 100

Stability

Stability Indicator/Materials to Avoid: YES

NONE CURRENTLY KNOWN.

Stability Condition to Avoid: OBTAIN/EVALUATE SAFETY INFO FOR EACH

COMPONENT BEFORE MIXING LIQUID HELIUM AND OTHER LIQUIFIED GASES.
Hazardous Decomposition Products: NONE

Disposal

Waste Disposal Methods: 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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