

HELIUM

MSDS Number

BHCZP

National Stock Number

6830-00-169-0789

Product Name

HELIUM

Manufacturer

AIR PRODUCTS AND CHEMICALS INC

Product Identification

Product ID:HELIUM

MSDS Date:07/10/1986

FSC:6830

NIIN:00-169-0789

MSDS Number: BHCZP

Responsible Party

AIR PRODUCTS AND CHEMICALS, INC.

NA

ALLENTOWN , PA 18195

US

Emergency Phone: 1-800-322-9092

Info Phone: 215-481-4911

Cage: 00742

Contractor

OXYGEN SALES AND SERVICE INC

11393

TACOMA, WA 98411-0393

US

800-345-3148/ 800-752-1597

Cage: 5H199

Ingredients

HELIUM

CAS: 7440-59-7

RTECS: NH6520000

Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:PERSONNEL, INCLUDING RESCUE WORKERS, SHOULD NOT ENTER AREAS WHERE THE OXYGEN CONCENTRATION IS BELOW 19%, UNLESS PROVIDED W/SELFCONTAINED BREATHING APPARATUS OR AIRLINE RESPIRATOR.

Explanation of Carcinogenicity:HELIUM IS A SIMPLE ASPHYXIANT AND HAS NO TLV

Effects of Overexposure:EXPOSURE TO OXYGEN DEFICIENT ATMOSPHERES MAY PRODUCE DIZZINESS,NAUSEA,VOMITING, LOSS OF CONSCIOUSNESS, AND DEATH. EXTENSIVE TISSUE DAMAGE OR BURNS CAN RESULT FROM EXPOSURE TO LIQUID HELIUM OR COLD H ELIUM VAPORS.

First Aid

First Aid: PERSONS SUFFERING FROM LACK OF OXYGEN SHOULD BE MOVED TO AREAS WITH NORMAL ATMOSPHERES. ASSISTED RESPIRATION & SUPPLEMENTAL OXYGEN SHOULD BE GIVEN IF VICTIM IS NOT BREATHING. IF CRYOGENIC LIQUID OR COLD BOIL OFF GAS CONTACTS WORKER'S SKIN OR EYES, FROZEN TISSUES SHOULD BE FLOODED/SOAKED W/ TEPID WATER (105-115°F; 41-46°C). DO NOT USE HOT WATER!! SHOULD SEEK MEDICAL ATTENTION IMMEDIATELY.

Fire Fighting

Flash Point: NA
Lower Limits: NA
Upper Limits: NA
Extinguishing Media: NA
Fire Fighting Procedures: NA
Unusual Fire/Explosion Hazard: NA

Accidental Release

Spill Release Procedures: AVOID CONTACT OF SKIN W/ LIQUID HELIUM OR ITS COLD BOIL OFF GAS. FLUSH LIQ SPILL W/ WTR TO DISPERSE. VENTILATE ENCLOSED AREAS TO PREVENT FORMATION OF OXYGEN DEFICIENT ATMOSPHERES CAUSED BY EVAPORATION OF LIQUID HELIUM OR THE RELEASE OF GASEOUS HELIUM.

Handling

Handling and Storage Precautions: PREVENT CONTACT OF LIQ HELIUM/ COLD BOIL OFF GAS W/ SKIN. USE A SUITABLE HAND TRUCK. STORE LIQ CONTNR & CYLINDER IN WELL VENTL AREA. KEEP FROM SOURCES HEAT
Other Precautions: STORAGE SHOULD NOT BE A HEAVY TRAFFICKED AREA. SEGREGATE FULL & EMPTY CYLINDERS. AVOID EXPOSURE TO AREAS WHERE SALT OR CORROSIVE CHEMICALS ARE PRESENT. STORAGE SHOULD BE FREE OF COMBUSTIBLE MATERIAL. AVOID ROLLING, DRAGGING, OR SLIDING CYLINDER.

Exposure Controls

Respiratory Protection: SELF-CONTAINED BREATHING APPARATUS IN OXYGEN DEFICIENT ATMOSPHERES. CAUTION!! RESPIRATORS WILL NOT FUNCTION. USE MAY RESULT IN ASPHYXIATION.
Ventilation: NATURAL OR MECHANICAL WHERE GAS IS PRESENT. VENTS SHOULD BE SITUATED TO AVOID HIGHER THAN NORMAL CONCENTRATION OF HELIUM
Protective Gloves: LOOSE FITTING OF IMPERMEABLE AS LEATHER
Eye Protection: SAFETY GLASSES/CHEMICAL GOGGLES
Other Protective Equipment: NONE
Supplemental Safety and Health
NK

Chemical Properties

Boiling Pt: B.P. Text: -452.1°F
Vapor Pres: NA
Vapor Density: 0.0114
Spec Gravity: 1 ATM 0.138
Solubility in Water: 1 ATM 0.861% BY VOLUME
Appearance and Odor: HELIUM IS COLORLESS & ODORLESS IN BOTH GASEOUS & LIQUID STATES

Stability

Stability Indicator/Materials to Avoid: YES
NONE
Stability Condition to Avoid: NONE
Hazardous Decomposition Products: NONE

Disposal

Waste Disposal Methods: ALLOW LIQUID HELIUM TO EVAPORATE IN A WELL VENTILATED LOCATION REMOTE FROM WORK AREAS. DO NOT ATTEMPT TO DISPOSE RESIDUAL HELIUM IN COMPRESSED GAS CYLINDERS. VENT HELIUM GAS SLOWLY TO A WELL VENTL OUTDOORS LOCATION REMOTE FROM WORK AREAS.

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