

HELIUM

MSDS Number

BHDSC

National Stock Number

6830-00-660-0027

Product Name

HELIUM

Manufacturer

AIR PRODUCTS AND CHEMICALS INC

Product Identification

Product ID:HELIUM

MSDS Date:07/10/1986

FSC:6830

NIIN:00-660-0027

MSDS Number: BHDSC

Responsible Party

AIR PRODUCTS AND CHEMICALS, INC.

2043 S 35TH ST

TACOMA , WA 98411-0393

US

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:HELIUM IS ODORLESS & NONTOXIC BUT MAY PRODUCE SUFFOCATION BY DILUTING THE CONCENTRATION OF OXYGEN IN AIR BELOW LEVELS NECESSARY TO SUPPORT LIFE.

Explanation of Carcinogenicity:NONE

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

Medical Cond Aggravated by Exposure:NONE

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 THE VICTIM IS NOT BREATHING. IF GAS CONTACTS SKIN OR EYES, FROZEN TISSUES SHOULD BE FLOODED OR SOAKED WITH TEPID WATER. DO NOT USE HOT WATER. GET MEDICAL ATTENTION IMMEDIATELY.

Fire Fighting

Flash Point: NA
Lower Limits: NA
Upper Limits: NA
Extinguishing Media: NONE
Fire Fighting Procedures: SELF CONTAINED BREATHING APPARATUS MAY BE REQUIRED TO PREVENT ASPHYXIATION OF RESCUE WORKERS.
Unusual Fire/Explosion Hazard: HELIUM IS NONTOXIC BUT CAN ACT AS A SIMPLE ASPHYXIAN BY DISPLACING THE AMOUNT OF OXYGEN IN AIR NECESSARY TO SUPPORT LIFE.

Accidental Release

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

Handling

Handling and Storage Precautions: USE PRESSURE REDUCING REGULATOR WHEN CONNECTING TO LOWER PRESSURE PIPING SYS. KEEP CYLINDER AWAY FROM SOURCES OF HEAT. SEGREGATE FULL/EMPTY CYLINDERS.
Other Precautions: AVOID EXPOSURE TO AREAS WHERE SALT OR CORROSIVE CHEMICALS ARE PRESENT. AVOID USE OF CARBON STEEL/OTHER METALS WHICH BECOME BRITTLE AT LOW TEMP. AVOID DRAGGING, ROLLING, OR SLIDING EVEN FOR SHORT DISTANCE. STORE IN NON HEAVY TRAFFIC AREAS.

Exposure Controls

Respiratory Protection: USE SELF CONTAINED BREATHING APPARATUS IN OXYGEN DEFICIENT ATMOSPHERES. CAUTION! RESPIRATORS WILL NOT FUNCTION. USE MAY RESULT IN ASPHYXIATION.
Ventilation: NATURAL/MECHANICAL VENTILATION.
Protective Gloves: LOOSE FITTING GLOVES/SUCH AS LEATHER
Eye Protection: SAFETY GLASSES/CHEMICAL GOGGLES
Other Protective Equipment: VENTS SHOULD BE SITUATED TO AVOID HIGHER THAN NORMAL CONCENTRATION OF HELIUM IN WORK AREAS.
Supplemental Safety and Health
NK

Chemical Properties

Boiling Pt: B.P. Text: -452.1 F
Melt/Freeze Pt: M.P/F.P Text: NA
Decomp Temp: Decomp Text: NA
Vapor Pres: NA
Vapor Density: 0.01114
Spec Gravity: 0.125
pH: NA
Evaporation Rate & Reference: NA
Solubility in Water: NA
Appearance and Odor: COLORLESS AND ODORLESS IN BOTH GASEOUS AND LIQUID STATES.
Percent Volatiles by Volume: NA
Corrosion Rate: NA

Stability

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

Disposal

Waste Disposal Methods: ALLOW LIQ HELIUM TO EVAPORATE IN A WELL

VENTILATED LOCATION REMOTE FROM WORK AREAS. DO NOT ATTEMPT TO DISPOSE OF RESIDUAL HELIUM IN COMPRESSED GAS CYLINDERS. VENT HELIUM GAS SLOWLY TO A WELL VENTILATED OUTDOORS LOCATION REMOTE FROM WORK AREAS.

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