

## **HELIUM**

### **MSDS Number**

BHDSB

### **National Stock Number**

6830-00-660-0026

### **Product Name**

HELIUM

### **Manufacturer**

AIR PRODUCTS AND CHEMICALS INC

### **Product Identification**

Product ID:HELIUM  
MSDS Date:02/16/1981  
FSC:6830  
NIIN:00-660-0026  
MSDS Number: BHDSB

### **Responsible Party**

AIR PRODUCTS AND CHEMICALS, INC.

ALLENTOWN , PA 18105

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**

NO HAZARDOUS INGREDIENT

### **Hazards**

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
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. PERSONEL/RESCUEWORKERS SHOULD NOT ENTER AREAS WHERE THE OXYGEN CONCENTRATION IS BELOW 19%UNLESS PROVIDED WITH A SELF-CONTAINED BREATHING APPARATUS/AIRLINE RESPIRATOR.  
Effects of Overexposure:EXPOSURE TO OXYGEN-DEFICIENT ATMOSPHERES MAY PRODUCE DIZZINESS/NAUSEA/VOMITING/ LOSS OF CONSCIOUSNESS/DEATH. DEATH MAY RESULT FM ERRORS IN JUDGEMENT/CONFUSION/ LOSS OF CONSCIOUSNESS WHICH PREV SELF RESCUE. AT LOW OXY CONCENT UNCONSCIOUSNESS& DEATH MAY OCCUR IN SEC'S W/O WARNING. EXTENSIVE TISSUE DAMAGE/BURNS CAN RESULT

### **First Aid**

First Aid:PERSONS SUFFERING FM LACK OF OXYGEN S/B MOVED TO AREAS

W/NORMAL ATMOSPHERE. SELFCONTAINED BREATHING APPARATUS MAY BE REQUIRED TO PREV ASPHYXIATION OF RESCUE WORKERS.CPR/SUPP OXYGEN S/B GIVEN IF THE VICTIM IS NOT BREATHING. IF CRYOGENICLIQ/COLD BOIL-OFF GAS CONTACTS SKIN/EYES, FROZEN TISSUES S/B FLOODED/SOAKED W/ TEPID WATER. CRYOGENIC BURNS WHICH RESULT IN BLISTERING/TISSUE FREEZE-MED ATTN.

## Accidental Release

Spill Release Procedures:AVOID CONTACT OF SKIN W/LIQUID HELIUM/COLD BOILOFFGAS. FLUSH LIQ SPILL W/WATER. VENTILATE ENCLOSED AREAS TO PREVENT FORMATION OF OXYGEN-DEFICIENT ATMOSPHERES CAUSED BY EVAP OF LIQ HELIUM OR THE RELEASE OF GASEOUS HELIUM.

## Handling

Handling and Storage Precautions:USE ONLY IN WELL VENTILATED AREAS. AVOID DRAGGING/ROLLING/SLIDING CYL'S EVEN FOR SHORT DISTANCES. STORE LIQUID CONTAINERS/CYL'S IN WELL VENT AREAS.  
Other Precautions:UTILIZE OXYGEN COMPATIBLE INSULATING MATLS/MINIMIZE EXPOSED PIPING SUR AREAS. COMPRESSED GAS CYL'S S/N BE REFILLED EXCEPT BY QUALIFIED PRODUCERS OF COMPRESSED GASES. SHIPPING COMPRESSED GAS CYL W/O PE RMISION OF OWNER IS VIOLATION FED LAW.

## 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 WHERE GAS IS PRESENT. VENTS S/B SITUATED TO AVOID HIGHER THAN NORMAL CONCENT OF HELIUM IN WORK AREAS.  
Protective Gloves:LOOSE FITTING LEATHER WORK GLOVES  
Eye Protection:SAFETY GLASSES/CHEMICAL GOGGLES  
Other Protective Equipment:NONE  
Supplemental Safety and Health  
NK

## Chemical Properties

Boiling Pt:B.P. Text:-452.1F  
Vapor Density:0.01114@0C  
Spec Gravity:0.138 AIR=1@32F  
Solubility in Water:0.861% BY VOL @ 68F  
Appearance and Odor:HELIUM IS COLORLESS AND ODORLESS IN BOTH THE GASEOUS AND LIQUID STATES.

## 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 EVAP IN A WELL VENT LOCATION. VENT HELIUM GAS SLOWLY TO WELL VENT OUTDOOR LOCA. DO NOT ATTEMPT TO DISPOSE OF RESIDUAL HELIUM IN COMPRESSED GAS CYL'S. RETURN CYL'S TO AIR PRODUCTS W/RESIDUAL PRESS/VALVE TIGHTLY CLOSED/CAP IN PLACE

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