

## **HELIUM**

### **MSDS Number**

BHCWK

### **National Stock Number**

6830-00F769995

### **Product Name**

HELIUM

### **Manufacturer**

AIR PRODUCTS AND CHEMICALS INC

### **Product Identification**

Product ID:HELIUM

MSDS Date:07/10/1986

FSC:6830

NIIN:00F769995

MSDS Number: BHCWK

### **Responsible Party**

AIR PRODUCTS AND CHEMICALS, INC.

2043 S 35TH ST

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**

HELIUM

CAS: 7440-59-7

RTECS: NH6520000

### **Hazards**

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

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

Health Hazards Acute and Chronic:EXTENSIVE TISSUE DAMAGE OR BURNS CAN RESULT FROM EXPOSURE TO LIQUID HELIUM OR COLD HELIUM VAPORS.

Explanation of Carcinogenicity:HELIUM IS A SIMPLE ASPHYXIAN & HAS NO TLV

Effects of Overexposure:MAY PRODUCE DIZZINESS, NAUSEA, VOMITING, LOSS OF CONSCIOUSNESS, & DEATH. HELIUM IS ODORLESS AND NONTOXIC, BUT MAY PRODUCE SUFFOCATION BY DILUTING THE CONCENTRATION OF OXYGEN IN AIR BELOW LEVELS NECESSARY TO SUPPORT LIFE.

### **First Aid**

First Aid: REMOVE PERSON TO AREA WITH NORMAL ATMOSPHERE. ASSISTED RESPIRATION & SUPPLEMENT OXYGEN SHOULD BE GIVEN IF THE VICTIM IS NOT BREATHING. IF CRYOGENIC LIQUID/COLD BOIL OFF GAS CONTACTS WORKER'S SKIN/EYES, FROZEN TISSUES SHOULD BE FLOODED OR SOAKED W/ TEPID WATER (105-115F; 41-46C). DO NOT USE HOT WATER. CRYOGENIC BURNS WHICH RESULT IN BLISTERING/DEEPER TISSUE FREEZING SHOULD BE SEEN BY A PHYSICIAN

## 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/ LIQ HELIUM OR COLD BOIL OFF GAS. FLUSH LIQ SPILL W/ WATER TO DISPERSE. VENTILATE ENCLOSED AREAS TO PREVENT FORMATION OF OXYGEN DEFICIENT ATMOSPHERES CAUSED BY EVAPORATION OF LIQUID HELIUM OR RELEASE OF GASEOUS HELIUM

## Handling

Handling and Storage Precautions: SECURE CYLINDERS WHEN IN USE. USE SUITABLE HAND TRUCK. KEEP CYLINDERS AWAY FROM SOURCES OF HEAT & HEAVY TRAFFIC AREA. 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 TEMPERATURES. USE ONLY METALS & MATERIALS COMPATIBLE W/ EXTREMELY LOW TEMPERATURES.

## Exposure Controls

Respiratory Protection: USE SELF-CONTAINED BREATHING APPARATUS IN OXYGEN DEFICIENT ATMOSPHERE. CAUTION!! RESPIRATORS WILL NOT FUNCTION. USE MAY RESULT IN ASPHYXIATION.  
Ventilation: NATURAL OR MECHANICAL WHERE GAS IS PRESENT  
Protective Gloves: LOOSE FITTING GLOVES/IMPERMEABLE (LEATHER)  
Eye Protection: SAFETY GLASSES/CHEMICAL GOGGLES.  
Other Protective Equipment: NONE  
Supplemental Safety and Health  
NK

## Chemical Properties

Boiling Pt: B.P. Text: \*\*SEE BELOW  
Vapor Pres: NA  
Vapor Density: 1 ATM 0.1114  
Spec Gravity: 1 ATM 0.138  
Solubility in Water: 1 ATM 0.861% B/VOL  
Appearance and Odor: COLORLESS AND ODORLESS IN BOTH GASEOUS AND LIQUID STATES

## Stability

Stability Indicator/Materials to Avoid: YES  
NONE  
Stability Condition to Avoid: NONE  
Hazardous Decomposition Products: NONE  
Conditions to Avoid Polymerization: \*\*BOILING PT: -452.1F/-268.9C

## Disposal

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

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