

## **ACETYLENE, ETHYNE, ETHINE**

### **MSDS Number**

BHDFM

### **National Stock Number**

6830-00-264-6752

### **Product Name**

ACETYLENE, ETHYNE, ETHINE

### **Manufacturer**

AIR PRODUCTS AND CHEMICALS INC

### **Product Identification**

Product ID:ACETYLENE, ETHYNE, ETHINE

MSDS Date:07/10/1986

FSC:6830

NIIN:00-264-6752

MSDS Number: BHDFM

### **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**

ACETYLENE

CAS: 74-86-2

### **Hazards**

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

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

Explanation of Carcinogenicity:ACETYLENE IS CLASSIFIED AS A SIMPLE ASPHYXIANT AND HAS NO TLV.

Effects of Overexposure:HEADACHES, DIZZINESS, SHORTNESS OF BREATH, AND LOSS OF CONSCIOUSNESS MAY OCCUR IF THE GAS IS PRESENT IN QUANTITIES TO DILUTE THE OXYGEN CONCENTRATION IN AIR. SYMPTOMS OF ANOXIA OCCUR ONLY WHEN THE GAS CONCENTRATIONS ARE WITHIN THE FLAMMABLE RANGE & THE MIXTURE HAS NOT IGNITED.

### **First Aid**

First Aid:FIRST DEGREE & MINOR SECOND DEGREE THERMAL BURNS FROM FIRES SHOULD BE IMMERSSED IN COOL WATER FOR 30 MINUTES.MAJOR BURNS SHOULD BE COVERED IN CLEANEST MATERIAL AVAILABLE. SEEK IMMEDIATE AID OF PHYSICIAN.PERSONS SUFFERING FROM LACK OF OXYGENSHOULD BE MOVED TO AREAS W/NORMAL ATMOSPHERE. ASSISTED RESPIRATION AND SUPPLEMENTAL OXYGEN SHOULD BE GIVEN IF VICTIM IS NOT BREATHING.

## Fire Fighting

Flash Point Method:CC  
Flash Point:OF / -18C  
Autoignition Temp:Autoignition Temp Text:\*\*\*  
Lower Limits:100  
Upper Limits:2.5  
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL, HALON  
Fire Fighting Procedures:STOP GAS FLOW/FIGHT FIRE CONVENTIONALLY. USE WATER SPRAY TO KEEP CYLINDERS/OTHERCONTAINERS COOL IF EXPOSED TO FIRE.KEEP PERSONNEL AWAY SINCE CONTNR CAN RUPTURE.  
Unusual Fire/Explosion Hazard:IT BURNS W/INTENSELY HOT FLAME.POTENTIAL EXPLOSION HAZARD EXISTS FROM REIGNITIONIF FIRE IS EXTING. W/O SHUTTING OFF ACETYLENE SOURCE.

## Accidental Release

Spill Release Procedures:VENTILATE AREA TO PREVENT FLAMMABLE MIXTURE FROM FORMING. REMOVE SOURCES OF IGNITION,HEAT,SPARKS, ETC.  
CAREFULLY REMOVE CYLINDERS W/SLOW LEAK TO A REMOTE OUTDOOR LOCATION. AVOID ENTERING AREA OF FLAMMABLE ATMOSPHERE.

## Handling

Handling and Storage Precautions:USE SUITABLE HANDTRUCK.ALWAYS OPEN/CLOSE ACETYLENEVALVES SLOWLY.KEEP CYLINDERS AWAY FROM HEAT  
SOURCESTORAGE SHOULD NOT BE IN HEAVY TRAFFIC AREAS.  
Other Precautions:SEGREGATE FULL & EMPTY CYLINDERS. KEEP ACETYLENE CYLINDERS STORAGE AREAS AWAY FROM OXYGEN AND OTHER OXIDIZERS. AVOID DRAGGING,ROLLING,OR SLIDING CYLINDERS. AVOID EXPOSURE TO AREAS WHERE SALT OR OT HER CORROSIVE CHEMICAL ARE PRESENT.

## Exposure Controls

Respiratory Protection:OXYGEN DEFICIENT ATMOSPHERES ARE IN THE FLAMMABLE RANGE. DO NOT ENTER!! RESPIRATORS WILL NOT FUNCTION.  
Ventilation:NATURAL OR MECHANICAL WHERE GAS IS PRESENT. MECHANICAL VENTILATION FOR ENCLSD AREA MUST MEET NEC REQMENTS FOR CL1,GRP4.  
Protective Gloves:LEATHER WORK GLOVES/WELDERS WORK GLOVES  
Eye Protection:SAFETY GLASSES/WELDERS GOGGLES  
Other Protective Equipment:LEATHER SLEEVES, LEATHER APRON AND OTHER STANDARD PROTECTIVEEQUIPMENT FOR CUTTING AND WELDING.  
Supplemental Safety and Health  
NK

## Chemical Properties

Boiling Pt:B.P. Text:\*\*SEE BELOW  
Vapor Pres:590 PSIA  
Vapor Density:1 ATM.0681  
Spec Gravity:1 ATM 0.906  
Solubility in Water:1ATM1.0CUFT/CUFTH2O  
Appearance and Odor:PURE: COLORLESS & ODORLESS; IMPURITIES IMPART A CHARACTERISTIC GARLIC LIKE ODOR

## Stability

Stability Indicator/Materials to Avoid:NO  
OXYGEN & HALOGENS. FORMS EXPLOSIVE COMPOUNDS W/COPPER,BRASS,COPPER SALTS, HG & HG SALTS,AG & AG SALTS, & HNO3.  
Stability Condition to Avoid:NEVER UTILIZE FREE GAS OUTSIDE CYLINDER AT PRESS. CYLINDER TO HEAT.  
Hazardous Decomposition Products:ACETYLENE WILL DECOMPOSE INTO ELEMENTAL CARBON AND HYDROGEN UNDER THE ABOVE CONDITIONS.

## Disposal

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF RESIFUAL GASEOUS ACETYLENE IN CYLINDERS. RETURN TO AIR PRODUCTS FOR DISPOSAL.

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