

ACETYLENE, ETHYNE, ETHINE

MSDS Number

BHDVR

National Stock Number

6830-00-765-0150

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:00-765-0150

MSDS Number: BHDVR

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

RTECS: AO9600000

ACGIH TLV: ASPHYXIAN; 9192

Hazards

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

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

Health Hazards Acute and Chronic:ACETYLENE IS A SIMPLE

ASPHYXIAN,IRRITANT,& ANESTHETIC.ABOUT 100MG PER LITER MAYBE
TOLERATED FOR 0.5-1.0 HOUR.THERE IS NO EXPERIMENTAL EVIDENCE OF
CHRONIC HARMFUL EFFECTS.

Effects of Overexposure:SYMPTOMS SUCH AS HEADACHES,DIZZINESS,SHORTNESS
OF BREATH, & LOSS OF CONSCIOUSNESS MAY OCCUR IN OXYGEN-DEFICIENT
AREA.SYMPTOMS OF ANOXIA OCCUR ONLY WHEN THE GAS CONCENTRATIONS ARE
W/IN FLAMMABLE RANGE & THE MIXTURE HAS NOT IGNITED.USE A SUITABLE
FLAMMABLE GAS METER CALIBRATED FOR ACETYLENE TO MEASURE GAS IN THE
AIR.

First Aid

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

Fire Fighting

Flash Point:0F -18C (CC)
Lower Limits:100%
Upper Limits:2.5%
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL, HALON
Fire Fighting Procedures:STOP GAS FLOW & FIGHT FIRE CONVENTIONALLY.USE WTR APRAY TO KEEP CYLS OR OTHER CONTAINERS COOL IF EXPOSED TO FIRE.KEEP PERSONNEL WELL AWAY CONTAINERS CAN RUPTURE
Unusual Fire/Explosion Hazard:ACETYLENE IS EXTREMELY FLAMMABLE & EXPLOSIVE.IT MAY DECOMPOSE VIOLENTLY IN ITS FREE STATE UNDER PRESSURE IN EXCESS OF 15 PSIG.IT BURNS W/INTENSELY HOT FLAME.

Accidental Release

Spill Release Procedures:VENTILATE AREA TO PREVENT FLAMMABLE MIXTURE FROM FORMING.REMOVE SOURCES OF IGNITION,HEAT,SPARKS,ETC.AVOID ENTERING AREA OF FLAMMABLE ATMOSPHERE.CARE- FULLY REMOVE CYLS W/SLOW LEAKS TO A REMOTE OUTDOOR LOCATION.CONTACT AIR PRODUCTS FOR ASSISTANCE.

Handling

Handling and Storage Precautions:USE/STORE ONLY IN WELL VENTILATED AREAS.NEVER EXPOSE ACETYLENE CYL TO HEAT.USE A SUITABLE HAND TRUCK/SEGREGATE FULL/EMPTY CYLS.
Other Precautions:ACETYLENE CYLS SHOULD BE STORED & USED IN AN UPRIGHT POSITION.WHEN USING ACETYLENE,CLOSE THE CYL VALVE BEFORE SHUTTING OFF THE REGULATOR TO PERMIT THE GAS TO BLEED FROM THE REGULATOR.AVOID HAZARDOUS MIXTURES & SOURCES OF IGNITION.

Exposure Controls

Respiratory Protection:OXYGEN-DEFICIENT ATMOSPHERES ARE IN THE FLAMMABLE RANGE.DO NOT ENTER.RESPIRATOR WILL NOT FUNCTION.
Ventilation:NATURAL/MECHANICAL WHERE GAS IS PRESENT.
Protective Gloves:LEATHER GLOVES/WELDER GLOVES
Eye Protection:SAFETY GLASSES/WELDERS GOGGLES
Other Protective Equipment:LEATHER SLEEVES, LEATHER APRON & STANDARD PROTECTIVE EQUIP FOR CUTTING & WELDING.
Supplemental Safety and Health
VENTILATION:MECHANICAL VENTILATION FOR ENCLOSED STORAGE AREAS MUST MEET NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS 1,GROUP A.

Chemical Properties

Boiling Pt:B.P. Text:-119.2F
Vapor Pres:@62.5F
Vapor Density:@68F 20C
Spec Gravity:@68F 20C
Solubility in Water:@64F 18C
Appearance and Odor:PURE ACETYLENE IS COLORLESS & ODORLESS.CARBIDE GENERATED ACETYLENE GARLIC ODOR.

Stability

Stability Indicator/Materials to Avoid:NO
OXIDIZERS SUCH AS OXYGEN,& HALOGENS.FORMS EXPLOSIVE COMPOUNDS W/CPR,BRASS,CPR SALTS,HG & HG SALTS,K,AG & AG SALTS,& HNO3
Stability Condition to Avoid:AVOID MECHANICAL SHOCKS TO CONTAINERS OF ACETYLENE.NEVER EXPOSE CYLS OR ACETYLENE SYSTEMS TO SOURCES OF HEAT.
Hazardous Decomposition Products:ACETYLENE WILL DECOMPOSE INTO ELEMENTAL CARBON & HYDROGEN UNDER THE ABOVE CONDITIONS.

Disposal

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

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