

AIR PRODUCTS AND CHEMICALS, INC. -- ACETYLENE, ETHYNE, ETHINE -- 6830-00-337-0389

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Product Identification
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Product ID:ACETYLENE, ETHYNE, ETHINE
MSDS Date:07/10/1986
FSC:6830
NIIN:00-337-0389
MSDS Number: BHDLJ
=== Responsible Party ===
Company Name:AIR PRODUCTS AND CHEMICALS, INC.
Box:538
City:ALLENTOWN
State:PA
ZIP:18105
Country:US
Info Phone Num:215-481-4911
Emergency Phone Num:1-800-523-9374 IN PA:1-800-322-9092
CAGE:00742
=== Contractor Identification ===
Company Name:AIR PRODUCTS AND CHEMICALS INC
Address:7201 HAMILTON BLVD
Box:City:ALLENTOWN
State:PA
ZIP:18195-1501
Country:US
Phone:800-345-3148/ 800-752-1597
CAGE:00742
Company Name:OXYGEN SALES AND SERVICE INC
Address:2043 S 35TH ST
Box:11393
City:TACOMA
State:WA
ZIP:98411-0393
Country:US
CAGE:5H199

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Composition/Information on Ingredients
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Ingred Name:ACETYLENE
CAS:74-86-2

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==== Hazards Identification =====

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

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

Health Hazards Acute and Chronic:ACETYLENE IS A SIMPLE

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

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

Effects of Overexposure:

HEADACHES, DIZZINESS, SHORTNESS OF BREATH, & LOSS OF CONSCIOUSNESS MAY OCCUR IF THE GAS IS PRESENT IN QUANTITIES SUFFICIENT 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 Measures =====

First Aid:FIRST/SECOND (MINOR) THERMAL BURNS FROM FIRES SHOULD BE IMMERSUED IN COOL WATER FOR 30 MINUTES. MAJOR SECOND /THIRD DEG

BURNS SHOULD BE COVERED IN THE CLEANEST MATERIAL AVAILABLE. PERSONS SUFFERING FROM LACK OF OXYGEN SHOULD BE MOVED TO FRESH AIR, ASSISTED RESPIRATION & SUPPLEMENTAL OXYGEN SHOULD BE GIVEN IF THE VICTIM IS NOT BREATHING. SEEK IMMEDIATE AID OF A PHYSICIAN.

==== Fire Fighting Measures =====

Flash Point Method:CC

Flash Point:OF/-18C

Autoignition Temp:Autoignition Temp Text:**

Lower Limits:2.5

Upper Limits:100

Extinguishing Media:CARB

ON DIOXIDE, DRY CHEMICAL, HALON

Fire Fighting Procedures:USE WATER SPRAY TO KEEP CYLINDERS/CONTAINERS COOL IF EXPOSED TO FIRE. KEEP PERSONNEL AWAY SINCE CONTAINERS CAN RUPTURE VIOLENTLY WHEN EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:ACETYLENE IS EXTREMELY

FLAMMABLE/EXPLOSIVE & BURNS WITH AN INTENSELY HOT FLAME. CAN REIGNITE IF FIRE IS EXTINGUISHED W/O SHUTTING OFF ACETYLENE SOURCE.

==== Accidental Release Measures =====

Spill Release Procedures

:VENTILATE AREA TO PREVENT FLAMMABLE MIXTURE FROM FORMING. REMOVE SOURCES OF IGNITION,HEAT,SPARKS, ETC. CAREFULLY REMOVE CYLINDERS W/SLOW LEAKS TO A REMOTE OUTDOOR LOCATION. CONTACT AIR PRODUCTS FOR ASSISTANCE.AVOID ENTERING AREA W/FLAMMABLE ATMOS.

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===== Handling and Storage =====

Handling and Storage Precautions:USE A SUITABLE HANDTRUCK FOR MOVEMENT.STORAGE SHOULD NOT BE IN HEAVY TRAFFIC AREAS TO PREVENT DAMAGE. KEEP CYLINDERS AWAY FROM SOURCES OF HEAT.

Other Precautions:SEGREGATE FULL/EMPTY CYLINDERS. AVOID DRAGGING,ROLLING, OR SLIDING CYLINDERS. CYLINDERS SHOULD BE UPRIGHT & SECURED WHEN IN USE. STORAGE OF 2500CU.FT. OR LESS IS PERMISSIBLE W/IN BUILDING,IN EXCESS OF 2500CU.FT. MUST BE STORED OUTDOORS.

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===== Exposure Controls/Personal Protection =====

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.

Protective Gloves:LEATHER GLOVES/WELDERS GLOVES

Eye Protection:SAFETY GLASSES/WELDERS GOGGLES

Other Protective Equipment:LEATHER SLEEVES,LEATHER APRON,OTHER STANDARD PROTECTIVE EQUIPMENT.

Supplemental Safety and Health

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===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:*SEE BELOW

Vapor Pres:590 PSIA

Vapor Density:0.0681

Spec Gravity:1 ATM .906

Solubility in Water:1 ATM 1.0

Appearance

and Odor:PURE: COLORLESS, ODORLESS IMPURITIES: GARLIC
LIKE ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:NO

OXIDIZER AS OXYGEN,HALOGENS.FORMS EXPLOSIVE COMPOUNDS WITH
COPPER,BRASS,COPPER SALT,HG/HG SALTS, K, AG/AG SALTS, & HNO3

Stability Condition to Avoid:AVOID MECH. SHOCKS TO CONTAINERS OF
ACETYLENE.NEVER UTILIZE FREE GAS OUTSIDE THE CYLINDER AT PRESS IN
EXCESS OF 15 PSIG.

Hazardous Decomposition Products:AC

ETYLENE WILL DECOMPOSE INTO

ELEMENTAL CARBON & HYDROGEN UNDER THE ABOVE CONDITIONS.

===== Disposal Considerations =====

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF RESIDUAL GASEOUS
ACETYLENE IN CYLINDERS. RETURN TO AIR PRODUCTS FORDISPOSAL.

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