

AIR PRODUCTS AND CHEMICALS INC. -- ACETYLENE,DISSOLVED -- 6830-00-292-0137

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Product Identification
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Product ID:ACETYLENE,DISSOLVED

MSDS Date:03/01/1998

FSC:6830

NIIN:00-292-0137

Status Code:A

MSDS Number: CJDGR

=== Responsible Party ===

Company Name:AIR PRODUCTS AND CHEMICALS INC.

Address:7201 HAMILTON BLVD

City:ALLENTOWN

State:PA

ZIP:18195-1501

Country:US

Info Phone Num:215-481-4911

Em

ergency Phone Num:800-523-9374/800-322-9092(IN PA)

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:AIR PRODUCTS AND CHEMICALS INC

Address:2900 52ND AVE

Box:City:HYATTSVILLE

State:MD

ZIP:20781-1103

Country:US

Phone:610-481-6333

CAGE:56028

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Composition/Information on Ingredients
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Ingred Name:

ACETYLENE

CAS:74-86-2

RTECS #:AO9600000

> Wt:99.

Other REC Limits:NONE RECOMMENDED

ACGIH TLV:ASPHYXIAN; 9394

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===== Hazards Identification =====

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

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

Health Hazards Acute and Chronic:TARGET ORGANS: RESPIRATORY SYSTEM.

ACUTE- ACETYLENE IS A SIMPLE ASPHYXIAN. IT SHOULD BE NOTED THAT BEFORE SUFFOCATION COULD OCCUR, THE LOWER FLAMMABILITY LIMIT OF

ACETYLENE IN AIR WOULD BE EXPECTED; POSSIBLY CAUSING BOTH AN OXYGEN DEFICIENT AND AN EXPLOSIVE ATMOSPHERE. EXPOSURE TO MODERATE CONCENTRATIONS MAY CAUSE DIZZINESS, HEADACHE, AND UNCONSCIOUSNESS. EYE CONTACT: NONE. SKIN CONTACT: NONE. IN GESTION: THIS PRODUCT IS A GAS. CANNOT BE SWALLOWED OR CONTACTED. CHRONIC- ACETYLENE IS A NON-TOXIC GAS THAT HAS NO CHRONIC HARMFUL EFFECTS EVEN IN HIGH CONCENTRATIONS. ACETYLENE HAS BEEN USED AS AN A NESTHETIC.

Explanation of Carcinogen

icity:NONE

Effects of Overexposure:ASPHYXIANAT, IRRITANT, ANESTHETIC. HEADACHE, DIZZINESS, SHORTNESS OF BREATH, LOSS OF CONSCIOUSNESS

Medical Cond Aggravated by Exposure:NONE

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===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, AMINISTER OXYGEN. OBTAIN PROMPT MEDICAL ATTENTION. EYE CONTACT: N/R. SKIN CONTACT: N/R. INGESTION: N/R. NOTE TO PH YSICIAN: NONE.

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

Flash Point:GAS

Autoignition Temp:=305.C, 581.F

Lower Limits:2.5%

Upper Limits:81%

Extinguishing Media:CARBON DIXOIDE, DRY CHEMICAL, WATER. KEEP CYLINDERS COOL WITH WATER SPRAY.

Fire Fighting Procedures:NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS MAY BE REQUIRED FOR FIRE FIGHTERS. EVACUATE ALL PERSONNEL FROM DANGER AREA. IF POSSIBLE, SHUT OFF FLOW OF ACETYLENE. EXTINGUISH FIRE ONLY IF FLOW

CAN BE STOPPED. IF A FLAME IS EXTINGUISHED AND ACETYLENE CONTINUE TO ESCAPE, AN EXPLOSIVE RE-IGNITION COULD OCCUR.

Unusual Fire/Explosion Hazard:EXCESSIVE HEAT OR FIRE WILL CAUSE PRESSURE RELIEF DEVICE TO MELT ALLOWING ACETYLENE TO ESCAPE. CYLINDERS MAY RUPTURE VIOLENTLY IF SIDEWALLS ARE EXPOSED TO DIRECT FLAME.

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

Spill Release Procedures:EVACUATE IMMEDIATE AREA. ELIMINATE ANY POSSIBLE SOURCES OF IGNITION, AND PROVIDE MAXIMUM EXPLOSION-PROOF VENTILATION. SHUT OFF SOURCE OF ACETYLENE, IF POSSIBLE. ISOLATE ANY LEAKING CYLINDER. IF LEAKING FROM CYLINDER, VALVE, OR PRESSURE RELIEF DEVICE, CONTACT YOUR SUPPLIER.

Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE AND USE WITH ADEQUATE VENTILATION. CYLINDERS SHOULD BE SEPARATED FROM OXYGEN AND OTHER OXIDIZERS BY A MINIMUM DISTANCE OF 20 FT. OR BY A BARRICADE OF NON-COMBUSTIBLE MATERIAL AT LEAST 5 FT. HIGH HAVING A FIRE RESISTANCE RATING OF AT LEAST 1/2 HOUR.

Other Precautions:STORAGE IN EXCESS OF 2,500 CU.FT. IS PROHIBITED IN BUILDINGS WITH OTHER OCCUPANCIES. DO NOT ALLOW STORAGE TEMPERATURES EXCEEDS 125F (52C). PROTECT CYLINDERS FROM PHYSICAL DAMAGE. DO NOT DRAG, SLIDE OR DROP. USE A SUITABLE HAND TRUCK. ELECTRICAL EQUIPMENT SHOULD BE NON-SPARKING OR EXPLOSION-PROOF.

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

Respiratory Protection:OXYGEN-DEFICIENT ATMOSPHERES ARE IN THE FLAMMABLE RANGE. DO NOT ENTER. AIR PURIFYING RESPIRATORS WILL NOT FUNCTION. USE NIOSH-APPROVED AIR-SUPPLIED RESPIRATORS IN OXYGEN-DEFICIENT ATMOSPHERES.

Ventilation:MECHANICAL (GENERAL AND/OR LOCAL EXHAUST, EXPLOSION-PROOF) VENTILATION TO ENSURE ACETYLENE DOES NOT REACH ITS LOWER FLAMMABLE LIMIT OF 2.5%.

Protective Gloves:WORK GLOVES WHEN HANDLING CYLINDERS

Eye Protection:SAFETY GLASSES WHEN

HANDLING CYLINDERS

Other Protective Equipment:SAFETY SHOES RECOMMENDED WHEN HANDLING CYLINDERS

Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH AFTER HANDLING AND BEFORE EATING, DRINKING OR SMOKING.

Supplemental Safety and Health

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Physical/Chemical Properties
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HCC:G2

Boiling Pt:=-75.2C, -103.4F

B.P. Text:10 PSIG

Melt/Freeze Pt:=-82.2C, -116.F

M.P/F.P Text:AT 10 PSIG

Vapor Pres:32844 @ 70F

Vapor

Density:0.90

Spec Gravity:GAS

Evaporation Rate & Reference:GAS

Solubility in Water:1.7 VOL/VOL @ 32F (0C)

Appearance and Odor:COLORLESS, ODORLESS GAS BUT COMMERCIAL PURITY HAS A GARLIC-LIKE ODOR

Percent Volatiles by Volume:>99

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Stability and Reactivity Data
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Stability Indicator/Materials to Avoid:NO

OXYGEN AND OTHER OXIDIZERS INCLUDING HALOGEN AND HALOGEN COMPOUNDS, MOISTURE, CERTAIN ACIDS, OR ALKALINE MATERIALS, COPPER, SILVER, MERCURY

Stab

Stability Condition to Avoid:STABLE AS SHIPPED. DO NOT USE AT PRESSURE ABOVE 15 PSIG. CYLINDERS SHOULD NOT BE EXPOSED TO SUDDEN SHOCK OR SOURCES OF HEAT

Hazardous Decomposition Products:HYDROGEN, CARBON

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Toxicological Information
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Toxicological Information:ACETYLENE IS A SIMPLE ASPHYXIANT.

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Ecological Information
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Ecological:NO ADVERSE ECOLOGICAL EFFECTS ARE EXPECTED.

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Disposal Consid

erations =====

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF RESIDUAL GAS IN CYLINDERS. RETURN CYLINDERS TO SUPPLIER. UNSERVICEABLE CYLINDERS SHOULD BE RETURNED TO THE SUPPLIER FOR SAFE AND PROPER DISPOSAL.

===== MSDS Transport Information =====

Transport Information:TRANSPORT SECURED UPRIGHT IN A WELL VENTILATED TRUCK. NEVER TRANSPORT IN PASSENGER COMPARTMENT OR TRUNK OF A VEHICLE. SHIPMENT OF COMPRESSED GAS CYLINDERS WHICH HAVE NOT BEEN FILLED WITH THE OWNERS CO NSENT IS A VIOLATION OF FEDERAL LAW (49CFR PART 173.301(B)).

===== Regulatory Information =====

SARA Title III Information:EXTREMELY HAZARDOUS SUBSTANCES (EHS): NONE. THRESHOLD PLANNING QUANTITY (TPQ): NONE.

Federal Regulatory Information:40 CFR PART 65: RISK MANAGEMENT PROGRAMS FOR CHEMICAL ACCIDENT RELEASE. ACETYLENE IS A REGULATED SUBSTANCE IN QUANTITIES OF 10,000 POUNDS (4,553 KG) OR GREATER. TSCA

: ACETYLENE IS LISTED ON THE TSCA I NVENTORY.

State Regulatory Information:CALIFORNIA: NONE.

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