

## **ACETYLENE**

### **MSDS Number**

BJFNR

### **National Stock Number**

6830-00-264-6752

### **Product Name**

ACETYLENE

### **Manufacturer**

NATIONAL WELDERS SUPPLY CO INC

### **Product Identification**

Product ID:ACETYLENE  
MSDS Date:07/01/1994  
FSC:6830  
NIIN:00-264-6752  
MSDS Number: BJFNR

### **Responsible Party**

NATIONAL WELDERS SUPPLY CO INC

810 GESCO

CHARLOTTE , NC 28231

US

Emergency Phone: 800-866-4422/800-424-9300(CHEMTREC)

Info Phone: 704-333-5475(X308)/FAX 344-1711

Cage: 18264

### **Contractor**

NATIONAL WELDERS SUPPLY CO, INC

NORFOLK, VA 23508

US

804-627-5673

Cage: 0SSR7

### **Ingredients**

ACETYLENE

CAS: 74-86-2

RTECS: AO9600000

Fraction By Weight: >=98%

ACGIH TLV: ASPHYXIAN; 9596

### **Hazards**

LD50 LC50 Mixture:PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:AS A NARCOTIC GAS OR INTOXICANT,  
ACETYLENE CAUSES HYPERCAPNIA (AN EXCESSIVE AMOUNT OF CARBON DIOXIDE  
IN THE BLOOD). REPEATED EXPOSURES TO TOLERABLE LEVELS HAS NOT SHOWN  
DELETERIOUS EFFECTS. THE MAJOR PROPERTY IS THE EXCLUSION OF AN  
ADEQUATE SUPPLY OF OXYGEN TO THE LUNGS.  
Explanation of Carcinogenicity:ACETYLENE IS NOT LISTED AS A CARCINOGEN  
OR POTENTIAL CARCINOGEN BY NTP, IARC, OR OSHA.  
Effects of Overexposure:INHALATION:LOW CONCENTRATIONS (10-20% IN AIR)

CAUSE SYMPTOMS SIMILAR TO THAT OF BEING INTOXICATED. HIGHER CONCENTRATIONS SO AS TO EXCLUDE AN ADEQUATE SUPPLY OF OXYGEN TO THE LUNGS CAUSING UNCONSCIOUSNESS.

Medical Condition Aggravated by Exposure: PERSONS IN ILL HEALTH WHERE SUCH ILLNESS WOULD BE AGGRAVATED BY EXPOSURE TO ACETYLENE SHOULD NOT BE ALLOWED TO WORK WITH OR HANDLE THIS PRODUCT.

## First Aid

First Aid: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO ACETYLENE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS AND BE COGNIZANT OF EXTREME FIRE AND EXPLOSION HAZARD.

## Fire Fighting

Flash Point: GAS

Autoignition Temp: Autoignition Temp Text: 565F

Lower Limits: 2.2

Upper Limits: 80 - 85

Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL.

Fire Fighting Procedures: IF POSSIBLE, STOP FLOW OF ESCAPING GAS. USE WATER SPRAY TO COOL SURROUNDING CONTAINERS. KEEP PERSONNEL FROM AREA SINCE HEATED CYLINDERS MAY RUPTURE VIOLENTLY.

Unusual Fire/Explosion Hazard: GASEOUS ACETYLENE IS SPONTANEOUSLY COMBUSTIBLE IN AIR AT >30 PSIA. IT HAS A VERY LOW IGNITION ENERGY, FIRES CAN REIGNITE VIOLENTLY. DOES NOT DISSIPATE READILY.

## Accidental Release

Spill Release Procedures: EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE APPROPRIATE PROTECTIVE EQUIPMENT. IF LEAK IS IN USER'S EQUIPMENT, BE CERTAIN TO PURGE PIPING WITH AN INERT GAS PRIOR TO ATTEMPTING REPAIRS. IF LEAK IS IN CONTAINER OR VALVE, CONTACT SUPPLIER IMMEDIATELY.

Neutralizing Agent: MFR GAVE NO INFORMATION ON MSDS.

## Handling

Handling and Storage Precautions: PROTECT FROM PHYSICAL DAMAGE. STORE UPRIGHT & SECURED IN COOL, DRY, WELL-VENTILATED AREA APPROPRIATE FOR FLAMMABLE GASES. KEEP TEMPERATURE Other Precautions: DANGER! HANDLE ONLY PER COMPRESSED GAS ASSN. PROCEDURES. SEE CGA PAMPHLETS G-1, P-1, P-14 & SAFETY BULLETIN SB-2. GROUND & BOND ALL LINES & EQUIPMENT. DO NOT REFILL CYLINDERS. DO NOT ROLL, SLIDE OR DRAG CYLINDERS, USE A CYLINDER TRUCK.

## Exposure Controls

Respiratory Protection: POSITIVE PRESSURE AIR LINE OR SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR EMERGENCY USE.

Ventilation: HOOD W/FORCED VENTILATION. MECHANICAL EXHAUST I/A/W ELECTRICAL CODES. LOCAL EXHAUST TO PREVENT ACCUMULATIONS >LEL.

Protective Gloves: PVC OR RUBBER

Eye Protection: SAFETY GOGGLES OR GLASSES.

Other Protective Equipment: SAFETY SHOES, SAFETY SHOWER.

Work Hygienic Practices: MFR: ? HMIS: USE GOOD INDUSTRIAL HYGIENE PRACTICES. MINIMIZE CONTACT & WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

SEGREGATE FULL & EMPTY CYLINDERS. ELIMINATE ALL IGNITION SOURCES FROM STORAGE & USE AREAS. USE ONLY NON-SPARKING OR EXPLOSION PROOF ELECTRICAL EQUIPMENT.

## Chemical Properties

HCC: G2

NRC/State Lic Num: NONE

Boiling Pt: B.P. Text: -119F, -84C

Melt/Freeze Pt: M.P/F.P Text: -113F, -81C

Vapor Pres: 4450 KPA

Vapor Density: 1.107KG/M3

Spec Gravity: 0.906

Evaporation Rate & Reference: N/A, DISSOLVED GAS

Solubility in Water: SOLUBLE

Appearance and Odor:A COLORLESS GAS W/AN ETHEREAL ODOR (COMMERCIAL ACETYLENE HAS A GARLIC ODOR)

## Stability

Stability Indicator/Materials to Avoid:NO OXYGEN AND OTHER OXIDIZERS INCLUDING ALL OF THE HALOGENS AND HALOGEN COMPOUNDS, COPPER, MERCURY, SILVER, BRASS.

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES. DO NOT ALLOW THE FREE GAS TO EXCEED 30 PSIA. AVOID SUDDEN SHOCK OR HEAT.

Hazardous Decomposition Products:CARBON AND HYDROGEN.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

## Disposal

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO YOUR SUPPLIER. FOR EMERGENCIES, CONTACT SUPPLIER.

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