

## **ACETYLENE**

### **MSDS Number**

BNRGX

### **National Stock Number**

6830-01-024-4413

### **Product Name**

ACETYLENE

### **Manufacturer**

UNION CARBIDE CORP LINDE DIV

### **Product Identification**

Product ID:ACETYLENE  
MSDS Date:04/01/1987  
FSC:6830  
NIIN:01-024-4413  
MSDS Number: BNRGX

### **Responsible Party**

UNION CARBIDE CORP LINDE DIV  
39 OLD RIDGEBURY ROAD  
DANBURY , CT 06817-0001  
US

Emergency Phone: 800-822-4357

Info Phone: 203-794-2000

Cage: 36346

### **Contractor**

UNION CARBIDE CORP LINDE DIV  
DANBURY, CT 06817-0001  
US  
800-822-4357; 304-744-3487  
Cage: 36346

### **Ingredients**

ACETYLENE  
CAS: 74-86-2  
RTECS: AO9600000  
Fraction By Weight: 100%  
ACGIH TLV: SIMPLE ASPHYXIAN

RE-IGNIT. FLAMM VAPS MAY SPREAD FROM LEAK. EXPLO

RTECS: 9999999ZZ

ATMOSPHERE W/APPRVD EXPLO METER.NO PART OF CNTNR

RTECS: 9999999ZZ

ALL CNTNRS ARE PROVIDED W/PRESS RELIEF DEVICE

RTECS: 9999999ZZ

TEMPS. CNTCT W/COPPER, SILVER OR MERCURY OR THEIR

RTECS: 9999999ZZ

LIGHTS, OTHER FLAMES, SPARKS, HEATERS, ELEC EQUIP,

RTECS: 9999999ZZ

DISTANT FROM PRODUCT HANDLING POINT.

RTECS: 9999999ZZ

OTHER DECOMP PRODS OF NORMAL OPERATION ORIGINATE FROM

RTECS: 9999999ZZ

ACETONE MAY CAUSE SEVERE LUNG DMG. IF LGE

RTECS: 9999999ZZ

BE EVAC QUICKLY IN MANNER WHICH AVOIDS ASPIR.

RTECS: 9999999ZZ

& CLINICAL CONDITION. NO SPECIFIC ANTIDOTE IS KNOWN.

RTECS: 9999999ZZ

ACCUMULATION IN LUNGS, A CNDTN WHICH MAY BE

RTECS: 9999999ZZ

CHANGE IS PROPORTIONAL TO LENGTH OF EXPOS. CHANGES

RTECS: 9999999ZZ

REDUCED LUNG FUNCTION/DISEASE. IN ADDN, CHANGES ON

RTECS: 9999999ZZ

AS SMOKING, ETC.

RTECS: 9999999ZZ

MOVE LEAKING CNTNRS TO WELL-VENT AREA. FLAMM GAS

RTECS: 9999999ZZ

ESPECIALLY CONFINED AREAS, CHECK ATMOSPHERE WITH

RTECS: 9999999ZZ

VENT, & POSITION OF WORKERS HEAD TO FUME PLUME,

RTECS: 9999999ZZ

(SUCH AS CHLORINATED HYDROCARBON VAPS FROM

RTECS: 9999999ZZ

COMPOSITION/QTY OF FUMES & GASES TO WHICH WORKERS

RTECS: 9999999ZZ

HELMET/BRTHG ZONE.SEE ANSI/AWS F1.1. READ/UNDERSTAND

RTECS: 9999999ZZ

DESIGNED TO W/STAND PRESS ENCOUNTERED. CLOSE VALVE

RTECS: 9999999ZZ

DO NOT STRIKE ARC ON CYL. DEFECT PRODUCED COULD LEAD

RTECS: 9999999ZZ

DO NOT STORE WITH O\*2 OR OTHER OXIDIZERS. PROT FROM

RTECS: 9999999ZZ

635 PSIG @ 21C.

RTECS: 9999999ZZ

## Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:INGEST:FROSTBITE OF LIPS/MOUTH MAY

RSLT FROM CNTCT W/LIQ. MAY CAUSE NAUS, INHAL:ASPHYXIAN. MOD CONC

OF VAP MAY CAUSE HDCH, DROWS, DIZZ, NAUS, VOMIT, EXCITATION, EXCESS

SALIVATION, & UNCON. SKIN:LIQ M AY CAUSE FROSTBITE. EYE:VAP MAY

CAUSE IRRIT. LIQ MAY CAUSE IRRIT & FROSTBITE. CHRONIC:NO EVIDENCE

OF (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ:ADVERSE EFTS AVAIL FROM INFO. NOTE TO

MD:ACUTE:SOME TOX GASES ASSOC W/WELDING & RELATED PROCESSES MAY

CAUSE PULM EDEMA, ASPHY, & DEATH. ACUTE OVEREXP MAY INCL

SIGNS/SYMPs SUCH AS WATERY EYES, HDCH, DFCLTY BRTHG, FREQUENT

COUGHING,OR CHEST PAINS. CHRONIC:PROTRACTED INHAL OF AIR CONTAM MAY

LEAD TO THEIR(ING 12)

Medical Cond Aggravated by Exposure:KNOWLEDGE OF AVAILABLE TOXICOLOGY

INFORMATION AND OF PHYSICAL AND CHEMICAL PROPERTIES OF MATERIAL

SUGGEST THAT OVEREXPOSURE IS UNLIKELY TO AGGRAVATE EXISTING MEDICAL

CONDITIONS.

## First Aid

First Aid:INGEST:DO NOT INDUCE VOMIT. CALL MD. SKIN:FLUSH W/WATER &

WARM FROSTBITE AREA W/WARM WATER (NOT >105F). IN CASE OF MASSIVE

EXPOS, REMOVE CLTHG WHILE SHOWERING W/WARM WATER. CALL MD.  
INHAL: MOVE TO FRESH AIR. IF BREATHING STOPPED, GIVE ARTIFICIAL RESPIRATION; IF  
BREATHING RESUMES, O<sub>2</sub> MAY BE GIVEN; CALL MD. EYE: IMMEDIATELY FLUSH THOROUGHLY  
W/WATER FOR AT LEAST 15 MINS. GET MD, PREFERENTLY OPHTHALMOLOGIST. NOTE TO  
MD: ASPIRATED (ING 9)

## Fire Fighting

Flash Point Method: TCC  
Flash Point: 0°F, -18°C  
Lower Limits: 2.3%  
Upper Limits: 100%  
Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING FIRE CONDITIONS

Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT  
. EVACUATE ALL PERSONS FROM DANGER AREA. IMMEDIATELY COOL CONTAINERS W/WATER SPRAY  
FROM MAXIMUM DISTANCE TAKING CARE NOT TO GET HIT BY FALLING OVER  
Unusual Fire/Explosion Hazard: EXTREMELY FLAMMABLE GAS. FORMS EXPLOSIVE MIXTURES  
W/AIR & OXIDIZING AGENTS. CONTAINER MAY RUPTURE DUE TO HEAT/FIRE. DO  
NOT EXTINGUISH FLAMES DUE TO POSSIBILITY OF EXPLOSION (ING 2)

## Accidental Release

Spill Release Procedures: FORMS EXPLOSIVE MIXTURES W/AIR. IMMEDIATELY EVACUATE ALL  
PERSONS FROM DANGER AREA. USE NIOSH/MSHA APPROVED SCBA WHERE NEEDED.  
REMOVE ALL SOURCES OF IGNITION IF W/OUT RISK. REDUCE VAPORS W/FOG OR  
LINE WATER SPRAY. SHUT OFF LEAK IF W/OUT RISK. VENT AREA OF LEAK  
OR (ING 16)  
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

## Handling

Handling and Storage Precautions: STORE IN COOL, DRY, WELL VENTILATED  
AREA. DO NOT STORE NEAR OPEN FLAMES. STORE CYLINDERS IN UPRIGHT  
POSITION SECURED TO PREVENT FALLING OVER.  
Other Precautions: COMPOSITION & QUANTITY OF FUMES & GASES DEPENDENT ON METAL  
BEING WORKED, PROCESS, PROCEDURE & ELECTRODES USED, COATING ON METAL  
BEING WORKED (SUCH AS PAINT, PLATING OR GALVANIZING), NUMBER OF  
WORKERS & VOLUME OF WORK AREA, QUALITY & AMOUNT OF (ING 18)

## Exposure Controls

Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRABLE FUME  
RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WORKING IN CONFINED  
SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE  
BELOW TLV.  
Ventilation: LOCAL EXHAUST: USE ENOUGH VENT, LOCAL EXHAUST OR BOTH, TO KEEP  
FUMES/GASES BELOW TLV IN WORKERS BREATHING ZONE & GENERAL AREA.  
Protective Gloves: WELDING GLOVES.  
Eye Protection: GOGGLES W/FILTER LENS AS PER ANSI Z49.1.  
Other Protective Equipment: ARM PROTECTORS, APRONS, HATS, SHOULDER  
PROTECTION, AS WELL AS SUBSTANTIAL CLOTHING.  
Work Hygienic Practices: TRAIN WELDER TO KEEP HEAD OUT OF FUMES & NOT TO  
TOUCH LIVE ELECTRICAL PARTS.  
Supplemental Safety and Health  
FIRE FIGHT PROCEDURE: TO EXTINGUISH FLAMES. REMOVE IGNITION SOURCES IF W/OUT RISK. IF  
FLAMES ACCIDENTALLY EXTINGUISHED, EXPLOSION RE-IGNITION MAY OCCUR. STOP FLOW OF  
GAS IF W/OUT RISK WHILE CONTINUING COOLING W/WATER SPRAY. REMOVE  
ALL CONTAINERS FROM FIRE AREA IF W/OUT RISK. ALLOW FIRE TO BURN  
OUT. ON-SITE FIRE BRIGADES MUST COMPLY W/OSHA 29CFR1910.156

## Chemical Properties

Vapor Pressure: ING 25  
Vapor Density: 0.91  
Solubility in Water: SLIGHTLY BY WEIGHT  
Appearance and Odor: COLORLESS GAS AT NORMAL TEMPERATURE AND PRESSURE;  
GARLIC LIKE ODOR  
Percent Volatiles by Volume: 100

## Stability

Stability Indicator/Materials to Avoid: NO

COPPER, SILVER, MERCURY OR THEIR ALLOYS, OXIDIZING AGENTS, ACIDS, HALOGENS, MOISTURE.

Stability Condition to Avoid: STABLE AS SHIPPED. AVOID USE AT PRESSURES ABOVE 15 PSIG.

Hazardous Decomposition Products: THERM DECOMP/BURNING MAY PRODUCE CO/CO\*2H\*2. WELDING/CUTTING PROCESS MAY FORM RXN PRODS SUCH AS CO & CO\*2. (ING 8)

Conditions to Avoid Polymerization: ELEVATED TEMPERATURES AND PRESSURE AND/OR THE PRESENCE OF A CATALYSTS.

## **Disposal**

Waste Disposal Methods: PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. KEEP PERSONNEL AWAY. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER OR LINER IN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

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