



# ETHYLENE

UN 1038 (Cryogenic liquid)

UN 1962 (Compressed gas)

Shipping Names: UN 1962 Ethylene, compressed

UN 1038 Ethylene, refrigerated liquid (cryogenic liquid)

Other Names: Acetene Ethene  
Etherin



## WARNING! • EXTREMELY FLAMMABLE!

### Hazards:

- Containers may BLEVE or explode when exposed to fire
- Odor is not a reliable indicator of the presence of toxic amounts of gas
- Cold gas is heavier than air and will collect and stay in low areas
- Gas may travel long distances to ignition sources and flashback
- Gas in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Contact with liquid may cause frostbite

### Awareness and Operational Level Training

#### Response:

- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Remove all ignition sources
- Evacuate the immediate area and downwind for a large release
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE or explosion
- Notify local health and fire officials and pollution control agencies

### Description:

- Colorless gas which may appear white
- Shipped and stored as a gas, a liquefied compressed gas or a cryogenic liquid
- Faint slightly sweet odor
- Liquefied gas floats and boils on water
- Extremely flammable
- Cold gas is heavier than air and will collect and stay in low areas

### Operational Level Training Response:

#### RELEASE, NO FIRE:

- Stop the release if it can be done safely
- Use large amounts of water well away from the release to disperse gas - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

#### FIRE:

- Do not extinguish the fire unless the flow of the gas can be stopped and any remaining gas is out of the line. Specially trained personnel may use fog lines to cool exposures and let the fire burn itself out
- Cool exposed noncryogenic containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location
- DO NOT APPLY WATER TO CRYOGENIC LIQUID CONTAINERS; if cryogenic liquid containers are exposed to direct flame or elevated temperatures for prolonged times, withdraw immediately to a secure location

### First Aid:

- Do not put yourself in danger by entering a contaminated area to rescue a victim
- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ◆ Inhalation - remove the victim to fresh air and give oxygen if available
  - ◆ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - ◆ Eye - rinse eyes with large volumes of water or saline for 15 minutes
- Seek medical attention
- Frostbite - warm injured area in very warm water
- For skin burns decontaminate with water and apply a clean dry dressing

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