



CARBON MONOXIDE

UN 1016

UN 9202

Shipping Name: UN 1016 Carbon monoxide
UN 9202 Carbon monoxide,
refrigerated liquid (cryogenic liquid)

Other Names: Carbon oxide CO
Carbonic oxide Flue gas



WARNING! • **POISON! BREATHING THE GAS CAN KILL YOU!**
• **EXTREMELY FLAMMABLE!**

Hazards:

- Odor is not a reliable indicator of the presence of toxic amounts of gas
- Under some conditions the 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
- Container may BLEVE or explode when exposed to fire
- Contact with liquid may cause frostbite

Awareness and Operational Level Training

Response:

- **Do not put yourself in danger by entering a contaminated area to rescue a victim**
- 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 or cryogenic liquid
- No odor
- Floats and boils on the surface of water and is slightly soluble in water
- Extremely flammable; flame has very little color
- Under some conditions the 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 from a distance
- 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
- **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
- If material is not in cryogenic form, cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cylinders are exposed to excessive heat from fire or flame contact, 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
- Seek medical attention
- Frostbite - warm injured area in very warm water
- For skin burns decontaminate with water and apply a clean dry dressing

CAS: 630-08-0