



PHOSPHINE

UN 2199

Shipping Name: Phosphine

Other Names: Hydrogen phosphide
Phosphorous hydride
Phosphorous trihydride



WARNING! • POISON! BREATHING THE GAS CAN KILL YOU!

- Fire fighting gear (including SCBA) provides NO protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
- EXTREMELY FLAMMABLE! MAY IGNITE SPONTANEOUSLY UPON EXPOSURE TO AIR!

Hazards:

- Gas is heavier than air and will collect and stay in low areas
- Odor is not a reliable indicator of the presence of toxic amounts of gas
- Container may BLEVE or explode when exposed to fire
- Gas may travel long distances and flashback
- Gas may explode in closed spaces (e.g., tanks, sewers, buildings)
- Irritating to skin, eyes, nose and lungs
- Contact with liquid may cause frostbite

Awareness and Operational Level Training Response:

- **DO NOT ATTEMPT RESCUE!**
- Stay uphill and upwind
- Determine the extent of the problem
- BACK OFF! - Isolate a wide area around the release or fire, deny entry and call for expert help
- Remove all ignition sources
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE or explosion
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies

Description:

- A colorless gas
- Garlic or fish-like odor
- Shipped and stored in cylinders as liquefied compressed gas
- Liquid floats and boils on the surface of water and is insoluble in water
- Extremely flammable
- 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
- Prevent contaminated runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water well away from the material 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 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 ATTEMPT RESCUE!**
- Provide Basic Life Support/CPR as needed
- Further 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
- Toxic effects may be delayed
- Frostbite - warm injured area in very warm water
- For skin burns decontaminate with water and apply a clean dry dressing

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