



DIBORANE

UN 1911

Shipping Name: Diborane
Other Names: Boroethane
Boron hydride
Diboron hexahydride



- WARNING!**
- **POISON! BREATHING THE GAS CAN KILL YOU!**
 - Firefighting gear (including SCBA) provides **NO** protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
 - **EXTREMELY FLAMMABLE! WILL IGNITE WITHOUT WARNING IN MOIST AIR AT ROOM TEMPERATURE!**
 - **DO NOT USE WATER! REACTS VIOLENTLY WITH WATER TO PRODUCE FLAMMABLE HYDROGEN GAS!**

Hazards:

- Reacts violently with halogenated hydrocarbons (Halon)
- Gas may travel long distances to ignition sources and flash back
- Gas is heavier than air and will collect and stay in low areas
- Gas in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Containers may explode when exposed to heat or fire
- Severely irritating to skin, eyes, nose and lungs; skin and eye contact can cause severe burns and blindness
- Contact with liquid may cause frostbite

Awareness and Operational Level Training

Response:

- **DO NOT ATTEMPT RESCUE!**
- 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
- Notify local health and fire officials and pollution control agencies

Description:

- Colorless compressed gas
- Sweet, repulsive odor
- Decomposes in water rapidly to form flammable hydrogen gas
- 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
- Use large amounts of water well away from the material to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

FIRE:

- Approach fire with extreme caution; consider letting fire burn
- 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
- If material is not leaking, cool exposed 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

First Aid:

- **DO NOT ATTEMPT RESCUE!**
- 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
- Victims should be examined by a physician as soon as possible
- **Do NOT perform direct mouth to mouth resuscitation; use a bag/mask apparatus**
- Frostbite - warm injured area in very warm water
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing

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