



# TRICHLOROSILANE

UN 1295

Shipping Name: Trichlorosilane  
Other Names: Silicochloroform  
Trichloromonosilane



- WARNING!**
- **POISON! BREATHING THE VAPORS CAN KILL YOU! SKIN AND EYE CONTACT CAUSES SEVERE BURNS AND BLINDNESS!**
  - Firefighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
  - **EXTREMELY FLAMMABLE! SPONTANEOUSLY COMBUSTS IN AIR!**
  - **DO NOT USE WATER! REACTS VIOLENTLY WITH WATER TO FORM TOXIC HYDROGEN CHLORIDE AND EXTREMELY FLAMMABLE AND EXPLOSIVE HYDROGEN GAS!**

## Hazards:

- Vapors are heavier than air and will collect and stay in low areas
- Container may BLEVE when exposed to fire
- Vapors may travel long distances to ignition sources and flash back
- Vapors in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Combustion products include toxic hydrogen chloride
- Corrosive to common metals releasing highly flammable hydrogen gas

## Description:

- Colorless liquid that fumes upon contact with air
- Sharp choking odor
- Sinks in water and reacts violently with water to produce toxic hydrochloric acid and extremely flammable and explosive hydrogen gas
- Extremely flammable
- Vapors are heavier than air and will collect and stay in low areas
- Boils at 90° F
- Produces large amounts of vapor

## 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
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

### Operational Level Training Response:

#### RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and 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 vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

#### FIRE:

- If material is on fire, and conditions permit, **DO NOT EXTINGUISH.**
- Material reacts with water but can be extinguished with medium expansion AFFF alcohol resistant foam
- 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
  - ◆ Swallowed - do not make the victim vomit
- Seek medical attention
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing

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