



# SULFURYL CHLORIDE

UN 1834

Shipping Name: Sulfuryl chloride  
Other Names: Sulfonyl chloride  
Sulfur oxychloride  
Sulfuric oxychloride



- WARNING!** • **POISON! BREATHING THE VAPORS CAN KILL YOU! EXTREMELY CORROSIVE TO SKIN AND EYES! CAN CAUSE SEVERE BURNS AND BLINDNESS!**
- Firefighting gear (including SCBA) provides NO protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
  - **DO NOT USE WATER! REACTS VIGOROUSLY WITH WATER TO FORM TOXIC HYDROCHLORIC AND SULFURIC ACIDS!**

## Hazards:

- Vapors are heavier than air and will collect and stay in low areas
- Container may BLEVE when exposed to fire
- Decomposition products upon heating include highly toxic sulfur oxides and hydrogen chloride
- Reacts with metals in the presence of moisture to release highly flammable and explosive hydrogen gas

## 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
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Evacuate or shelter in place 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

## Description:

- Colorless liquid
- Very pungent odor
- Sinks in water and reacts vigorously with water producing toxic hydrochloric and sulfuric acids
- Nonflammable
- Vapors are heavier than air and will collect and stay in low areas
- Produces large amounts of vapor

## 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 release
- Use large amounts of water well away from the release to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk
- If in a building, evacuate building and confine vapors by closing doors and shutting down HVAC systems

### FIRE:

- If possible, do not allow water to come in contact with the material. Material does not burn; if material is involved in a fire, fight surrounding fire with an agent other than water; if water must be used, use it in flooding quantities
- 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 (unvented container distorts, bulges or shows any other signs of expanding), 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
  - ♦ 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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