



SULFUR TETRAFLUORIDE

UN 2418

Shipping Name: Sulfur tetrafluoride
Other Names: Tetrafluorosulfurane



WARNING! • **POISON ! BREATHING THE GAS CAN KILL YOU! SKIN AND EYE CONTACT CAUSES 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 DIRECTLY ON THE MATERIAL! REACTS WITH WATER TO FORM TOXIC HYDROFLUORIC ACID!**

Hazards:

- Gas is heavier than air and will collect and stay in low areas
- Container may explode or BLEVE when exposed to fire
- Decomposes upon heating to form toxic sulfur oxides and hydrogen fluoride gas
- Exposure to the 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
- 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:

- Colorless gas
- Distinct sulfur odor like rotten eggs
- Reacts with water to form toxic hydrofluoric acid
- Nonflammable
- Gas is heavier than air and will collect and stay in low areas
- Shipped and stored as a compressed liquefied gas

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 the gas - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk
- If in a building, evacuate building and confine gas by closing doors and shutting down HVAC systems

FIRE:

- Material does not burn; fight surrounding fire with an agent appropriate for the burning material; if possible, do not allow water to come in contact with the material. If material is involved in a fire, use dry chemical to extinguish; if water must be used, use it in flooding quantities
- If container is not leaking, cool exposed containers with large quantities of water from unattended equipment or remove containers if it can be done safely
- Material does not burn; fight surrounding fire with an agent appropriate for the burning material

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
- 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
- Note to physician: skin burns can be treated with calcium gluconate gel

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