

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

Components: TITANIUM TETRACHLORIDE
Percent 100%
OSHA PEL: N/A
ACGIH TLV N/A
Other Limits Recommended: 0.5 mg/cum

SECTION 2 - CHEMICAL CHARACTERISTICS

Boiling Point: 136.4C (277.5F)
Melting Point: -24.1C (-11.4F)
Vapor Pressure: 10 mm of HG @ 20C
Specific Gravity: 1.726
Vapor Density: 6.6
Solubility in Water: LIBERATES HYDROGEN CHLORIDE GAS
Evaporation Rate: N/A
Water Reactive: REACTS VIGOROUSLY
Appearance and Odor: COLORLESS TO PALE YELLOW FUMING LIQUID.
IRRITANT ODOR.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NONFLAMMABLE
Auto Ignition Temp: N/A
Flammability limits in air: N/A
LEL: N/A
UEL: N/A
Extinguishing Media: NONFLAMMABLE
Special Fire Fighting Proc: MSHA/NIOSH APPROVED RESPIRATOR AND
PROTECTIVE CLOTHING.
Unusual Fire & Expl Hazrds: REACTS VIGOROUSLY WITH WATER TO RELEASE
HYDROGEN CHLORIDE GAS.

SECTION 4 - REACTIVITY HAZARD DATA

Stability: STABLE
Cond to Avoid (Stability): WATER AND MOISTURE.
Materials to Avoid: WATER, POTASSIUM, ALCOHOLS, REACTIVE
METALS, AMMONIA, ALKALIS.
Hazardous Decomp. Prod: HYDROGEN CHLORIDE VAPORS.
Hazardous Polymerization: WILL NOT OCCUR
Cond. to avoid (Poly): NO ADDITIONAL REMARKS

SECTION 5 - HEALTH HAZARD DATA

Route of Entry - Inhalation: YES
Route of Entry - Skin: YES
Route of Entry - Ingestion: YES
Carcinogen Listed in: NOT LISTED
Health Hazard, Acute: EXTREMELY TOXIC BY INGESTION AND INHALATION. EYE AND SKIN CONTACT
Health Hazard, Chronic: TOXIC TO LUNGS, MUCOUS MEMBRANES
Symptoms of Exposure:
Med. Cond. Generally
Aggravated By Exp: GET MEDICAL ASSISTANCE FOR ALL OVEREXPOSURE.

Emergency/First Aid Procedures

EYES: FOR LIQUID CONTACT: CHECK FOR AND REMOVE CONTACT LENSES. DO NOT USE AN EYE OINTMENT. SEEK MEDICAL ATTENTION.
SKIN: FOR LIQUID CONTACT: REMOVE CONTAMINATED CLOTHES. WIPE EXCESS LIQUID FROM SKIN WITH DRY CLOTH. APPLY WATER IN LARGE AMOUNTS.
INHALATION: MOVE VICTIM TO REST IN A WELL-VENTILATED AREA. GET MEDICAL ATTENTION.
INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection: USE MSHA/NIOSH APPROVED RESPIRATOR OR EQUIVALENT.
Protective Gloves: NEOPRENE OR EQUIVALENT
Eye Protection: SPLASH GOGGLES.
Ventilation To Be Used: APPROVED FUME HOOD OR EQUIVALENT VENTILATION.
Other Protective Equipment:
Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/ LEAK PROCEDURE

Steps If Matl. Released/Spill: VENTILATE AREA. ABSORB SPILL WITH AN INERT MATERIAL AND PUT THE SPILLED MATERIAL IN A CLOSED APPROPRIATE WASTE DISPOSAL.
Waste Disposal Method: CONTACT A PERMITTED WASTE DISPOSER TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.
Precautions For Handling/Storing: KEEP BOTTLES LOCKED UP, OUT OF REACH OF CHILDREN. KEEP CONTAINER CLOSED IN A DRY AREA
Other Precautions: DO NOT GET IN EYES OR ON SKIN. DO NOT
Other Precautions (cont.) INHALE VAPORS. DO NOT INGEST.
NFPA RATING: Health 3, Flammability 0, Reactivity 1, Special W.
HMIS RATING: Health 3, Flammability 0, Reactivity 2, Special J.