

Common Name: **DIMETHYL MERCURY**

Synonyms: None
 CAS No: 593-74-8
 Molecular Formula: C₂H₆Hg
 RTK Substance No: 0763
 Description: Colorless liquid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 3 - Fire 0 - Reactivity DOT#: UN 2024 ERG Guide #: 151 Hazard Class: 6.1 (Poison)	Dimethyl Mercury is a FLAMMABLE LIQUID. Use dry chemical, CO ₂ , water spray or foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Mercury vapors</i> . CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.	Dimethyl Mercury reacts with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) to cause a fire hazard.

SPILL/LEAKS

Isolation Distance:
 Small Spills: 60 meters (200 feet)
 Large Spills: 270 meters (900 feet)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.
 DO NOT wash into sewer.
 DO NOT let this substance enter the environment as it bioaccumulates.

EXPOSURE LIMITS

OSHA: 0.01 mg/m³, 8-hr TWA; 0.04 mg/m³, STEL
NIOSH: 0.01 mg/m³, 10-hr TWA; 0.03 mg/m³, STEL
ACGIH: 0.01 mg/m³, 8-hr TWA; 0.03 mg/m³, STEL
IDLH: 2 mg/m³
 (All the above are as Mercury)

PHYSICAL PROPERTIES

Odor Threshold: No information
Flash Point: 41°F (5°C)
Vapor Density: 7.9 (air = 1)
Vapor Pressure: 50 mm Hg at 68°F (20°C)
Specific Gravity: 3 (water = 1)
Water Solubility: Insoluble
Boiling Point: 204°F (96°C)
Melting Point: -45.4°F (-43°C)
Molecular Weight: 230.7

PROTECTIVE EQUIPMENT

Gloves: 4-H/Silver Shield® (60-minutes breakthrough)
Coveralls: DuPont Tychem® Responder®, CSM and TK for toxic and corrosive chemical vapors
Boots: No information
Respirator: >0.01 mg/m³ - Supplied air

HEALTH EFFECTS

Eyes: Irritation and burns
Skin: Irritation and burns
Acute: Irritation of the nose, throat and lungs with coughing, wheezing and/or shortness of breath
Chronic: Carcinogen (kidney) in animals
 Several *Methyl Mercury compounds* are known teratogens
 Sore gums, tingling or "pins and needles" feeling in fingers, irritability and weakness, slurred speech and metallic taste

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.
Remove contaminated clothing and wash contaminated skin with large amounts of soap and water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer to a medical facility.