Material Safety Data Sheet
Mercury(I) chloride

Section 1 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.
Warning! Toxic. Harmful if swallowed. Causes eye, skin, and respiratory tract irritation. May cause allergic skin reaction. May be harmful if absorbed through the skin. May cause central nervous system effects. May cause adverse reproductive effects. Light sensitive. May cause kidney damage. Moisture sensitive.
Target Organs: Kidneys, central nervous system, reproductive system.

Potential Health Effects
Eye: May cause eye irritation. Contact may cause ulceration of the conjunctiva and cornea.
Skin: May cause skin irritation. May be harmful if absorbed through the skin. May cause an allergic reaction in certain individuals. May cause a gray discoloration of the skin.
Ingestion: Harmful if swallowed. May cause kidney failure. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. May cause weakness, fatigue, vascular collapse, and esophagus damage.
Inhalation: May cause respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause kidney damage.
Chronic: Prolonged or repeated inhalation of dusts may cause neurological damage. May cause kidney injury. May cause tremors, irritability, loss of memory and intellect. May also cause Pink disease characterized by skin, cardiovascular, and neurobehavioral abnormalities. Long-term exposure may result in discoloration of the lens and cornea (mercurialentis). Mercurialentis is a sign of exposure and not of toxicity. Inorganic Mercury substances such as Mercury (I) chloride have not been shown to be human teratogens, but should be HANDLED WITH CAUTION since related Mercury compounds effect fertility in males and females.

Section 2 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion: Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical
device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.
Antidote: The use of Dimercaprol or BAL (British Anti-Lewisite) as a chelating agent should be determined by qualified medical personnel.

Section 3 - Personal Protection

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 4 - Physical and Chemical Properties

Physical State: Solid
Appearance: white
Odor: none reported
pH: Not available.
Boiling Point: Not available.
Freezing/Melting Point: Not available.
Decomposition Temperature: > 752 deg F
Solubility: Insoluble in water.

Section 5 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. May decompose when exposed to light.
Conditions to Avoid: High temperatures, incompatible materials, light, moisture.
Incompatibilities with Other Materials: Substance may react with acacia, ammonia, alkali chlorides, bromides, carbonates, cocaine, copper salts, cyanides, hydroxides, iodine, iodoform, lead salts, silver salts, soap, sulfates, and sulfites.
Hazardous Decomposition Products: Hydrogen chloride, mercury/mercury oxides.
Hazardous Polymerization: Has not been reported.