

SECTION I NAME

Product	MERCUROUS CHLORIDE
Chemical Synonyms	Calomel, Mercury (I) Chloride
Formula	HgCl
Unit(s) Size	100, 500 grams
C.A.S. No.	7546-30-7

24 HOUR EMERGENCY ASSISTANCE

CHEMTREC
800-424-9300

Day 716-226-6177
Night 716-334-4222

Health

4

Fire

0

Reactivity

0

NFPA

HAZARD RATING

LEAST

SLIGHT

MODERATE

HIGH

EXTREME

0

1

2

3

4

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Mercurous Chloride	100%	See Section V
DANGER! ☠ POISON ☠ MAY BE FATAL IF INHALED OR SWALLOWED, MAY CAUSE DELAYED BURNS.		

SECTION III PHYSICAL DATA

Melting Point (°F)	302°C	Specific Gravity (H ₂ O = 1)	7.150 at 25°C
Boiling Point (°F)	Sublimes 400-500°C	Percent Volatile by Volume (%)	100% above 400°C
Vapor Pressure (mm Hg)	Negligible as solid	Evaporation Rate (n-Butyl Ac. = 1)	Non-volatile (NA)
Vapor Density (Air = 1)	Data not listed		
Solubility in Water	Insoluble in water		
Appearance and Odor	Heavy, white crystals or crystalline powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA)	Flammable Limits in Air % by Volume	NA	Lower	Upper
Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dangerous when heated to decomposition, it emits highly toxic mercury vapors and hydrogen chloride when heated.

D.O.T.

NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

TWA: As Mercury [CAS No. 7439-97-6] (ACGIH 1983-84)
Mercury Vapor 0.05 mg/m³ (AIR); inorganic compounds 0.1 mg/m³.

Effects of Overexposure

INGESTION:

Excessive doses (120 mg.) may cause mercury poisoning. Symptoms of mercury poisoning are violent pain, vomiting, diarrhea, kidney shock, intestinal hemorrhage and death.

INHALATION:

Prolonged or repeated exposure to the dust causes upper respiratory tract irritation, lung injury, vomiting, chest and abdominal pain, fatigue, gingivitis, difficulty swallowing, irritability, tremors and kidney damage.

SKIN AND EYES:

May produce delayed burns.

Emergency and First Aid Procedures

INGESTION:

If swallowed, if conscious, give one or two glasses of water, induce vomiting. Repeat until vomit fluid is clear. Call physician immediately.

SKIN:

Flush thoroughly with water, then wash with soap and water.

INHALATION:

Remove to fresh air. If ill effects develop, get medical attention.

EYES:

Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower eyelids. Get prompt medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Decomposes by alkalis. Darkens on exposure to light, decomposes into mercuric chloride and metallic mercury.
	Stable	x		
Incompatibility (Materials to avoid)		Bromides, Iodides, alkali chlorides, sulfates, sulfites, carbonates, hydroxides, lime water acacia, ammonia, silver salts.		
Hazardous Decomposition Products		Thermal decomposition or heating may produce highly toxic mercury vapors and chlorine gas.		
Hazardous Polymerization		Conditions to Avoid		
May Occur	Will Not Occur	Not applicable.		
	x			

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Wear suitable protective clothing, sweep up and place in a suitable container for disposal. Wash spill area with soap and water.
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Waste Disposal Method

Dispose of in an approved chemical landfill or contract with a licensed waste disposal service.

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail work in a ventilation hood or wear a NIOSH-approved dust mask or respirator.			
Ventilation	Local Exhaust	Yes	Special	No
	Mechanical (General)	Yes	Other	No
Protective Gloves	Rubber or plastic		Eye Protection	Chemical safety glasses
Other Protective Equipment	Goggles, smock, apron, eye wash station, ventilation hood, proper gloves.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing	Store in a cool, dry place away from fire hazards. Wash thoroughly after handling. Keep container tightly closed when not in use. Wash contaminated clothing before reuse.
Other Precautions	Read label on container before using. Do not breathe dust. Avoid contact with eyes or mucous membranes or prolonged contact with skin.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No.	No. 1	Date	1/12/87	Approved	<i>Charles R. Carroll</i>	Chemical Safety Coordinator	<i>C</i>
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