



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. MM 309  
Effective Date March 26, 1999

## SECTION V HEALTH HAZARD DATA

MM 309

**Threshold Limited Value** RTECS No. OV8750000 Toxicity data: Ori-rat LD50 166 mg/kg, ori-mus LD50 217 mg/kg. Skin-rat LD50: 1500 mg/kg.; ipr-mus LD50: 10 mg/kg. TWA: As Mercury [CAS No. 7439-97-6] (ACGIH 1992-93). Mercury vapor 0.05 mg/m<sup>3</sup> (AIR); inorganic compounds 0.1 mg/m<sup>3</sup>.

**Effects of Overexposure** **TARGET ORGANS AFFECTED:** Central nervous system, kidneys.  
**INGESTION:** Excessive doses 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:** Causes irritation. May produce delayed burns, irritability, tremors and kidney damage. Exercise appropriate procedures to minimize potential hazards.

**Emergency and First Aid Procedures** **INGESTION:** If swallowed, if conscious, give one or two glasses of water or milk to drink, induce vomiting. Repeat until vomit fluid is clear. Call physician immediately. Never give anything by mouth to an unconscious person. **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

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Decomposes by alkalis. Darkens on exposure to light, decomposes into mercuric chloride and metallic mercury.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Bromides, iodides, alkalis, chlorides, sulfates, sulfides, carbonates, hydroxides, lime water, acacia, ammonia, silver salts, copper and lead salts.

**Hazardous Decomposition Products** Thermal decomposition or heating may produce highly toxic mercury vapors and chlorine gas. Oxides of the contained metal and halogen, possibly also free or ionic halogen.

<b>Hazardous Polymerization</b>		<b>Conditions to Avoid</b>
<b>May Occur</b>	<b>Will Not Occur</b>	
	X	Not applicable.

## SECTION VII SPILL OR LEAK PROCEDURES

**Steps to be taken in case material is released or spilled** Recover for use if not contaminated. Wearing suitable protective clothing, sweep up and place in a suitable container for disposal. Wash spill area with soap and water.

**Waste Disposal Method** Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

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

## 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/MSHA-approved dust mask or respirator.

<b>Ventilation</b>	<b>Local Exhaust</b>	Yes.	<b>Special</b>	No.
	<b>Mechanical (General)</b>	Yes.	<b>Other</b>	Adequate to maintain below exposure limit.

<b>Protective Gloves</b>	Rubber.	<b>Eye Protection</b>	Chemical safety glasses.
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**Other Protective Equipment** Goggles, smock, apron, eye wash station, ventilation hood, proper gloves.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store in a cool, dry place away from fire hazards. Protect from light. Wash thoroughly after handling.  
Keep container tightly closed when not in use.

**Other Precautions** Read label on container before using. Do not wear contact lenses when working with chemicals.  
Do not breathe dust. Use with adequate ventilation. Avoid contact with eyes or mucous membranes or prolonged contact with skin. Remove and wash contaminated clothing.

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

<b>Revision</b> No. 4	<b>Date</b> 3/26/99	<b>Approved</b> Michael Raszeja	<b>Chemical Safety Coordinator</b> MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	MERCUROUS CHLORIDE	 <b>CHEMTREC</b> <b>800-424-9300</b> Day 716-226-6177  <b>NFPA HAZARD RATING</b> LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4  <b>HMIS *</b> HEALTH FIRE REACTIVITY 3 0 0
<b>Chemical Synonyms</b>	Mercury (I) Chloride; Calomel	
<b>Formula</b>	Hg <sub>2</sub> Cl <sub>2</sub>	
<b>Unit Size</b>	up to 2.5 Kg.	
<b>C.A.S. No.</b>	10112-91-1	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
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Mercurous Chloride	100%	See Section V.
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**DANGER! POISON** **HARMFUL IF INHALED, SWALLOWED**

**OR ABSORBED THROUGH SKIN. CAUSES IRRITATION.**

## SECTION III PHYSICAL DATA

<b>Melting Point (°F)</b>	400°C (752°F) sublimes	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	7.150 at 25°C
<b>Boiling Point (°F)</b>	Not applicable.	<b>Percent Volatile by Volume (%)</b>	Not applicable.
<b>Vapor Pressure (mm Hg)</b>	Not applicable.	<b>Evaporation Rate ( =1)</b>	Not applicable.
<b>Vapor Density (Air=1)</b>	Not applicable.		
<b>Solubility in Water</b>	0.002 grams/100 cc		
<b>Appearance &amp; Odor</b>	White, tasteless heavy powder; odorless.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

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

### SPECIAL FIREFIGHTING PROCEDURES

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

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 151)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

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

D.O.T. **MERCURY COMPOUNDS, SOLID, N.O.S. , (MERCUROUS CHLORIDE), 6.1, UN 2025, PG III**

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