# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

## MERCURIC CHLORIDE

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### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

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| **American International Chemical, Inc.** | **Emergency Number: Chemtrec** | **800-424-9300** |
| **135 Newbury Street** | | **703-527-3887** |
| **Framingham, MA 01701** | **Information Number:** | **800-238-0001** |

Date: August 2007

Synonyms: Mercury (II) Chloride; Mercury Bichloride; Mercury Perchloride

CAS #: 7487-94-7

DOT Hazard Class: Class 6.1, Packaging Group II, UN1624, Poison

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### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Mercuric Chloride 98-100% OSHA/PEL: 0.1mg/$m^3$ ACGIH/TLV: 0.1 mg/$m^3$

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### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White, odorless crystals or powder. Causes severe irritation. May be fatal if swallowed, inhaled, or absorbed through skin. Exceptional health and contact hazards. Do not get in eyes, on skin, on clothing. Do not breathe dust. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling.

POTENTIAL HEALTH EFFECTS:
**Eyes:** Contact will cause severe irritation or burns.
**Skin:** Contact will cause severe irritation or burns.
**Skin Absorption:** May be fatal. Rapid absorption.
**Inhalation:** May be fatal. Will cause irritation of the upper respiratory tract.
**Ingestion:** May be fatal if swallowed. Can cause headache, nausea, vomiting, gastrointestinal irritation, convulsions, unconsciousness.
**Chronic Effects:** Mercury build-up in the brain, liver, and kidneys, headache, shakes, loose teeth, loss of appetite, skin ulceration, impaired memory.
**Medical Conditions Generally Aggravated by Exposure:** None Identified

CARCINOGENICITY: Target organs - central nervous system, liver, kidneys, respiratory system, lungs, eyes, skin, GI tract.

## SECTION 4 - FIRST AID MEASURES

**Eye Contact:** In case of eye contact, immediately flush with plenty of water for at least 15 minutes.
**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before re-use.
**Inhalation:** If inhaled, remove to the fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.
**Ingestion:** CALL A PHYSICIAN. If swallowed, if conscious, give large amounts of water. Induce vomiting.
**In All Of The Above:** Seek medical attention, if symptoms persist.

## SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Not Applicable

Flammable Limits: Upper: Not Applicable Lower: Not Applicable

Extinguishing Media*:* Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire Explosion Hazard: Closed containers exposed to heat may explode.

Auto Ignition Temperature: Not Applicable

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel.
Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. EPA Hazardous Waste Number: D009 (EP Toxic Waste)

## SECTION 7 - HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Keep container tightly closed. Store in secure poison area. Keep product out of light.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area. General or local exhaust ventilation is recommended.

SKIN AND EYE PROTECTION:
Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from dust.

WORK, HYGIENIC PRACTICES:
As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS:
Threshold limit value (TLV/TWA): 0.1 $mg/m^3$.
TLV(skin) is for Mercury, Acryl and inorganic compounds, as Hg.
Short term expose limit (STEL): Not established.
Permissible exposure limit (PEL): 0.1 $mg/m^3$. PEL (ceiling-skin) is for Mercury, Acryl and inorganic compounds, as Hg.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 302°C (575°F) at 760 mm Hg

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): 8.7

Specific Gravity (H20=1): 5.44

Bulk Density: Not Applicable

Percent Volatile by Volume (%): 0 (21°C)

Melting Point: 277°C (530°F) at 760 mm Hg

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Moderate (1-10%)

pH: 3.2 (0.2M solution)

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## SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen Chloride, Mercury Fumes

KEEP AWAY FROM: Strong acids, alkalies, carbonates, strong bases, amines and ammonia, most common metals, bromides, antimony, arsenic, sodium, potassium, metallic salts, albumin, gelatin, tannic acid, formates, sulfites, hypophosphites, phosphates.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

Oral Rat $LD_{50}$ for Mercury Bichloride 1 mg/kg
Intraperitoneal Mouse $LD_{50}$ for Mercury Bichloride 5 mg/kg
Subcutaneous Rat $LD_{50}$ for Mercury Bichloride 14 mg/kg
Carcinogenicity: NTP: No IARC: No Z List: No OSHA Reg: No
Carcinogenicity: None Identified
Reproductive Effects: None Identified

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## SECTION 12 - ECOLOGICAL INFORMATION

Not available

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## SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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## SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME:.....Mercuric Chloride
TECHNICAL SHIPPING NAME:.....Mercuric Chloride
D.O.T. HAZARD CLASS:.....6.1
U.N./N.A. NUMBER..... UN1624
PRODUCT RQ (lbs.).....1 lb
D.O.T. LABEL.....Mercuric Chloride, UN1624, Class 6.1, PG II
D.O.T. PLACARD.....Poison
PRODUCT LABEL.....Poison

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## SECTION 15 - REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT):
This product is listed on the TSCA Inventory.

CERCLA REPORTABLE REQUIREMENTS: RQ=1 lb, TPQ=500/10,000 lbs

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance: Listed: Contains Mercury

Section 313 Toxic Chemicals: Listed: Contains Mercury

Section 311/312 Hazard Category:
Immediate (acute) Health Hazard, Delayed (chronic).

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## SECTION 16 - OTHER INFORMATION

Reason for Issue: Changed Date

**This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.**

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