

Material Safety Data Sheet

Mercury(II) acetate

ACC# 13750

Section 1 - Chemical Product and Company Identification

MSDS Name: Mercury(II) acetate

Catalog Numbers: M143I-100, M143I-50

Synonyms: Mercury(II) acetate; Mercuryl acetate; Mercury diacetate; Mercuriacetate; Mercuric acetate; Diacetoxymecrucus; Mercuric diacetate.

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|-----------|------------------|---------|---------------|
| 1600-27-7 | Mercuric acetate | >98 | 216-491-1 |

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.

Danger! May be fatal if inhaled, absorbed through the skin or swallowed. Corrosive. Harmful if absorbed through the skin. Causes respiratory tract irritation. Harmful if inhaled. Causes eye and skin irritation. May cause central nervous system effects. May cause kidney damage. Light sensitive. Heat sensitive. May cause fetal effects based upon animal studies.

Target Organs: Kidneys, nervous system.

Potential Health Effects

Eye: Causes severe eye irritation. May cause eye burns. May cause eye injury.

Skin: Causes skin irritation. Harmful if absorbed through the skin. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May cause severe irritation and possible burns. May cause skin discoloration.

Ingestion: May be fatal if swallowed. May cause irritation of the digestive tract. May cause kidney damage. Based on data relating to inorganic mercury compounds it may cause adverse nervous system effects and possible damage. Acute mercury poisoning can produce sudden and profound circulatory collapse with tachycardia, hypotension, and peripheral vasoconstriction, vomiting, and bloody diarrhea. It can be a corrosive and a nephrotoxic. Salivation, metallic taste, abdominal pain, seizures, proteinuria, nephrotic syndrome (oliguria and anuria) may occur. Ingestion can produce central nervous effects as well as peripheral nervous system effects. Ingestion may produce effects on the brain including tremors, irritability and sensitivity, xenophobia, insomnia, hallucinations, and mania. Symptoms of acute mercury poisoning include: nausea, vomiting, bloody diarrhea, foul taste in the mouth, loosened teeth, circulatory collapse, peripheral neurological disease, and kidney damage. Mercury poisoning can produce shakes, irritability, sore gums, increased saliva, personality changes, and permanent brain or kidney damage.

Inhalation: Harmful if inhaled. May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause effects similar to those described for ingestion.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged or repeated exposure may cause gastrointestinal irritation and kidney damage. Chronic exposure to mercury may cause permanent central nervous system damage, fatigue, weight loss, tremors, personality changes.

Section 4 - 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 immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: ; Flammability: ; Instability:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use only in a chemical fume hood. Do not breathe dust.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Poison room locked.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use only under a chemical fume hood.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|------------------|---|---|---|
| Mercuric acetate | 0.1 mg/m ³ TWA (as Hg) (listed under Mercury, aryl and inorganic compounds).Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Mercury, aryl and inorganic compounds). | 0.05 mg/m ³ TWA (vapor, except organo alkyls, as Hg) (listed under Mercury compounds).10 mg/m ³ IDLH (as Hg, not including organo(alkyl) compounds) (listed under Mercury compounds). | 0.1 mg/m ³ Ceiling (listed under Mercury, aryl and inorganic compounds). |

OSHA Vacated PELs: Mercuric acetate: No OSHA Vacated PELs are listed for this chemical.

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 protective 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 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: mild odor - acetic odor

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Decomposes

Freezing/Melting Point: 354 deg F

Decomposition Temperature: Not available.

Solubility: 25% @ 10C

Specific Gravity/Density: 3.3 (water=1)

Molecular Formula: C₄H₆O₄Hg

Molecular Weight: 318.68

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Light, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents - strong acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, mercury/mercury oxides.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 1600-27-7; AI8575000

LD50/LC50:

CAS# 1600-27-7:

Oral, mouse: LD50 = 23900 ug/kg;

Oral, rat: LD50 = 40900 ug/kg;

Skin, rat: LD50 = 570 mg/kg;

Carcinogenicity:

CAS# 1600-27-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: Teratogenic effects have been observed in experimental animals.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | Canada TDG |
|-----------------------|-----------------|---------------------------|
| Shipping Name: | MERCURY ACETATE | No information available. |
| Hazard Class: | 6.1 | |
| UN Number: | UN1629 | |
| Packing Group: | II | |

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 1600-27-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

CAS# 1600-27-7: 500 lb TPQ (lower threshold); 10000 lb TPQ (upper threshold)

SARA Codes

CAS # 1600-27-7: immediate.

Section 313

This material contains Mercuric acetate (listed as Mercury compounds), >98%, (CAS# 1600-27-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 1600-27-7 (listed as Mercury compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA. CAS# 1600-27-7 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1600-27-7 can be found on the following state right to know lists: California, (listed as Mercury compounds), New Jersey, Pennsylvania, Massachusetts.

California Prop 65

WARNING: This product contains Mercuric acetate, listed as 'Mercury compounds', a chemical known to the state of California to cause developmental reproductive toxicity.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T+ N

Risk Phrases:

R 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 13 Keep away from food, drink and animal feeding stuffs.

S 36 Wear suitable protective clothing.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

S 28A After contact with skin, wash immediately with plenty of water

S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 1600-27-7: 3

Canada - DSL/NDSL

CAS# 1600-27-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 1600-27-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 12/12/1997

Revision #5 Date: 1/18/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.