Section I - Product Identification

A solution of mercuric chloride and sodium acetate in water.

Section II - Hazards Identification

Danger. Fatal if swallowed. Wash thoroughly after handling. Do not eat drink or smoke while using this product. If swallowed immediately call a poison center and rinse mouth with water. Administer antidote for mercury poisoning if available. Signs of overexposure include increased salivation, foul breath, abdominal pain, bloody diarrhea and inflammation and/or ulceration of the mucous membranes. Skin contact may result in burns and/or dermatitis.

Safety Ratings

<table>
<thead>
<tr>
<th>Health: Hazardous</th>
<th>Flammability: Nonflammable</th>
<th>Reactivity: Slight</th>
<th>Contact: Hazardous</th>
</tr>
</thead>
</table>

Recommended safety equipment: safety goggles, lab coat and proper gloves

Storage: Room Temperature

NFPA Ratings

<table>
<thead>
<tr>
<th>Health = 2</th>
<th>Flammability = 0</th>
<th>Reactivity = 0</th>
</tr>
</thead>
</table>

Potential Health Effects

Mercury salts are extremely toxic. Mercuric chloride is an experimental teratogen and mutagen. Because of the genetic toxicity of mercury compounds, Pregnant women should be particularly vigilant when handling this item.

Inhalation: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

Ingestion: Inhalation will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Mercuric chloride is a toxic, corrosive and cumulative poison.

Skin contact: Absorbed through the skin. Repeated contact with mercuric chloride can cause systemic poisoning.

Eye contact: Even brief contact can cause irreversible eye damage.

Chronic Exposure: Mercury salts are cumulative poisons. Mercuric chloride is an experimental teratogen and mutagen

Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to alcohols and/or mercuric chloride. Preexisting eye, skin, and respiratory conditions may also be aggravated. Mercuric chloride has shown genetic toxicity in some animals.

Section III - Composition/Information on Hazardous Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>OSHA Pel</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium acetate</td>
<td>6131-90-4</td>
<td></td>
<td></td>
<td></td>
<td>1.5%</td>
</tr>
<tr>
<td>Mercuric chloride</td>
<td>7487-94-7</td>
<td>0.1 mg/m³ (TWA) skin</td>
<td>0.025 mg/m³ (TWA) skin</td>
<td>6.0% w/v</td>
<td></td>
</tr>
</tbody>
</table>
Section IV - First Aid Measures

Inhalation: Remove from source of exposure and get immediate medical attention. Be prepared to assist breathing.

Ingestion: Do not induce vomiting. Get immediate medical attention even if symptoms improve.

Skin Contact: In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. Get medical advice.

Eye Contact: In case of eye contact, flush with water for at least 15 minutes and get immediate medical attention.

Section V - Fire Fighting Measures

Flash point: Not applicable.

Fire: Not normally a fire hazard,

Explosion: Not normally an explosion hazard.

Fire Extinguishing Media: Any means suitable for surrounding fire.

Special information: Pyrolysis will release mercurial compounds.

Section VI - Accidental Release Measures

Remove all sources of ignition, absorb with a suitable absorbent and store for disposal or recycling. Mercury compounds are subject to reportable quantities under CERCLA and may not be flushed down the drain. Insure compliance with all government regulations.

Section VII - Handling and Storage

Store locked up. Store in a closed container, away from open flames or other sources of ignition.

Section VIII - Exposure Control/Personal Protection

Airborne Exposure Limits: See section III.


Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are required.

Eye Protection: Laboratory safety goggles or similar products are required.

Section IX - Physical and Chemical Properties

Boiling Point: 100 °C (212°F)

Density: 1.07 g/ml

Vapor pressure (mm Hg): 18 @ 20 °C

Evaporation Rate (Water = 1): 1

Vapor Density (air = 1): 1.6

Solubility: Infinitely miscible with water

Appearance and Odor: A clear, colorless liquid with a vinegary odor.

Section X - Stability and Reactivity

Stability: Freezes at low temperature.

Hazardous Decomposition Products: Mercury compounds.

Hazardous polymerization: Will not occur.

Incompatibilities: Oxidizers.

Conditions to avoid: heat, flame and sources of ignition.

Section XI - Toxicological Information

Mercuric chloride is a cumulative poison.

Cancer lists

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>NTP?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric Chloride</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>3</td>
</tr>
<tr>
<td>Sodium Acetate</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>none</td>
</tr>
</tbody>
</table>
Section XII - Ecological Information

*Environmental Fate:* Not biodegradable  
*Environmental Toxicity:* Very toxic to aquatic life.  
Mercuric chloride will bioaccumulate.

Section XIII - Disposal Considerations

Disposal of mercury compounds is severely restricted. Waste should be sent to an approved waste disposal facility. Dispose of contents and container in accordance with all government regulations.

Section XIV - Transportation information

*DOT Shipping name:* Mercury compounds, liquid, n.o.s. (mercuric chloride)  
*Hazard Class:* 6.1  
*Packing Group:* III  
*DOT Hazard Label:* Keep away from food

Section XV - Regulatory Information

**Chemical Inventory Status**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric Chloride</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sodium Acetate</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Federal, State and International Regulations**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>RQ</th>
<th>TPQ</th>
<th>List</th>
<th>Category</th>
<th>261.33</th>
<th>8(D)</th>
<th>Ca. Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric Chloride</td>
<td>500</td>
<td>500</td>
<td>No</td>
<td>Mercury cmpd</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Sodium Acetate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chemical Weapons Convention</td>
<td>No</td>
<td></td>
<td>TSCA 12(b): No</td>
<td></td>
<td>CDTA: Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SARA 311/312: Acute: Yes, Chronic: Yes, Flammable: No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section XVI - Other Information

This information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.  
Revision Date: Nov. 2, 2017