Section I - Product Identification
A solution of mercuric chloride, PVA, acetic acid and glycerin in alcohol and water.

Section II - Composition/Information on Hazardous Components

Section III - Hazards Identification
Danger: Highly flammable liquid and vapor. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Keep container tightly closed. Use only non-sparking tools. Take precautions against static discharge. Wear protective clothes and eye protection. In case of skin contact immediately remove all contaminated clothing. Rinse with water or shower. In case of fire, use fire extinguishers approved for alcohol fires. 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. Mercury salts are extremely toxic. Mercuric chloride is an experimental teratogen and mutagen.

Safety Ratings

<table>
<thead>
<tr>
<th>Safety Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health:</strong> Hazardous</td>
</tr>
<tr>
<td>Recommended safety equipment: safety goggles, lab coat and proper gloves</td>
</tr>
<tr>
<td><strong>Storage:</strong> Keep cool, away from sources of ignition in a well ventilated area.</td>
</tr>
<tr>
<td>NFPA Ratings</td>
</tr>
<tr>
<td>Health = 2</td>
</tr>
</tbody>
</table>

Potential Health Effects

Because of the genetic toxicity of mercury compounds, Pregnant women should be particularly vigilant when handling this item. 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.

*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 highly toxic cumulative poison and extremely corrosive.

*Skin contact:* Alcohols are absorbed through the skin (as is mercuric chloride). Repeated contact with alcohols causes defatting of the skin with resultant irritation and flaking. Repeated contact with mercuric chloride can cause systemic poisoning.

*Eye contact:* Irritating and corrosive. 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. Methanol has shown genetic toxicity in some animals.
### 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:** 28 °C (83 °F) TCC

**Flammable Limits (for ethanol):** LEL 3%  UEL 19%

**Fire:** Water is ineffective against alcohol fires but may be used to cool adjacent containers.

**Fire Extinguishing Media:** Alcohol foam, carbon dioxide or dry chemical.

**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.

**Ventilation System:** Usually not required. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

**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:** 88 °C (190 °F)

**Density:** 1.02 g/ml

**Vapor pressure (mm Hg):** Unknown

**Evaporation Rate (Ethanol = 1):** 1

**Vapor Density (air = 1):** 1.6

**Solubility:** Infinitely miscible with water

**Appearance and Odor:** A clear (or slightly hazy), colorless liquid with the characteristic odor of alcohol.

### 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

Chronic consumption of ethanol is believed to be linked to liver disease, cancer and birth defects. Mercuric chloride is a highly toxic cumulative poison.
### Section XII - Ecological Information

Environmental Fate: Not biodegradable

Environmental Toxicity: Very toxic

Ethanol evaporates quickly and is not expected to bioaccumulate. Ethanol is removed from the air by dry and liquid adsorption. The half-life for ethanol in the atmosphere is one to ten days. 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/IATA Shipping name: Ethanol Solution  
Hazard Class: 3  
Packaging Group III  
Hazard Label: Flammable liquid  
UN Identification Number: UN1170

Bottles smaller than 32 Fl. Oz. are eligible to be shipped under ORM-D or limited quantity exemptions [49 CFR section 173.150(b)(2), 173.150(C) and IATA Y341].

### Section XV - Regulatory Information

#### Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Methanol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mercuric Chloride</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Glycerine</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Federal, State and International Regulations

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
<th>RCRA 261.33</th>
<th>TSCA 8(D)</th>
<th>Ca. Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>No</td>
<td>No</td>
<td>Yes No</td>
<td>No No</td>
<td>No</td>
</tr>
<tr>
<td>Methanol</td>
<td>No</td>
<td>No</td>
<td>Yes No</td>
<td>U154 No</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethanol</td>
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<td>No No</td>
<td>No No</td>
<td>No</td>
</tr>
<tr>
<td>Mercuric Chloride</td>
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<td>No</td>
<td>Mercury cmpd</td>
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<tr>
<td>Acetic Acid</td>
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<td>No</td>
<td>No No</td>
<td>No No</td>
<td>No</td>
</tr>
<tr>
<td>Glycerine</td>
<td>No</td>
<td>No</td>
<td>No No</td>
<td>No No</td>
<td>No</td>
</tr>
</tbody>
</table>

Chemical Weapons Convention: No  
TSCA 12(b): No  
CDTA: Yes  
SARA 311/312: Acute: Yes, Chronic: Yes, Flammable: Yes

### 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: Jan. 18, 2018