### Section I - Product Identification

Eight different solutions. All liquids may be irritating to eyes, skin, digestive tract or respiratory tract.

### Section II - Hazards Identification

Overview: May be harmful if swallowed. May be irritating to skin and eyes.

<table>
<thead>
<tr>
<th>Safety Ratings</th>
<th>Health: Slight</th>
<th>Flammability: None</th>
<th>Reactivity: None</th>
<th>Contact: Slight</th>
</tr>
</thead>
</table>

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

**Storage:** General storage

**NFPA Ratings**
- Health = 1
- Flammability = 0
- Reactivity = 0

**Potential Health Effects**

The toxicology of this compound has not been completely examined. It is presumed that the toxicity of this item is similar to other weak acids.

- **Inhalation:** May be irritating. Not normally a problem.
- **Ingestion:** While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc.
- **Skin contact:** Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
- **Eye contact:** May be irritating
- **Chronic Exposure:** Unknown
- **Aggravation of preexisting conditions:** Unknown

### Section III - Composition/Information on Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>OSHA Pel (TWA) skin</th>
<th>ACGIH TLV (TWA) skin</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thimerosal (Reagent 1 &amp; 2)</td>
<td>54-64-8</td>
<td>0.1 mg/m³</td>
<td>0.025 mg/m³</td>
<td>0.5%</td>
</tr>
<tr>
<td>Thimerosal (Positive Control)</td>
<td>54-64-8</td>
<td>0.1 mg/m³</td>
<td>0.025 mg/m³</td>
<td>0.05%</td>
</tr>
<tr>
<td>Sodium Azide (Negative Control)</td>
<td>26628-22-8</td>
<td>0.3 mg/m³</td>
<td>0.3 mg/m³</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Tetramethylbenzidine (Chromogen)</td>
<td>54827-17-7</td>
<td>---------</td>
<td>---------</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Sodium Azide (Dilution Buffer)</td>
<td>22628-22-8</td>
<td>0.3 mg/m³</td>
<td>0.3 mg/m³</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Thimerosal (Wash Concentrate)</td>
<td>54-64-8</td>
<td>0.1 mg/m³</td>
<td>0.025 mg/m³</td>
<td>0.4%</td>
</tr>
<tr>
<td>Phosphoric Acid (Stop Solution)</td>
<td>7664-38-2</td>
<td>1 mg/m³</td>
<td>1 mg/m³</td>
<td>5%</td>
</tr>
</tbody>
</table>
Section IV - First Aid Measures

Inhalation: Unlikely to be a problem. Remove from source of exposure and get medical attention for any breathing difficulty.
Ingestion: If the victim is conscious, induce vomiting. Never give anything by mouth to an unconscious person.
Skin Contact: Wash affected area with soap and water. Get medical advice if irritation develops.
Eye Contact: Rinse thoroughly with running water. Get medical advice if irritation develops.

Section V - Fire Fighting Measures

Flash point: Not applicable.
Flammable Limits: Not applicable.
Fire: Not normally a fire Hazard.
Explosion: Not Normally an explosion hazards.
Fire Extinguishing Media: Any means suitable for surrounding fire.
Special information: Pyrolysis will release corrosive oxides.

Section VI - Accidental Release Measures

Absorb with a suitable absorbent (such as paper towels) and store in a suitable container for disposal.

Section VII - Handling and Storage

Store in a closed container, protected from freezing.

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 not required but recommended as part of good laboratory practice.
Eye Protection: Laboratory safety goggles or similar products are not required but recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties

Boiling Point: 100°C
Vapor pressure (mm Hg): 18 @ 20°C
Vapor Density (air = 1): 0.6
Appearance and Odor: A clear, colorless liquid.
Density: 1.0 g/ml
Evaporation Rate (water = 1): 1
Solubility: Infinitely miscible with water

Section X - Stability and Reactivity

Stability: Freezes at low temperature.
Hazardous Decomposition Products: Nothing unusual.
Hazardous polymerization: Will not occur.
Incompatibilities: Nothing unusual.
Conditions to avoid: Excessive cold/heat and light.

Section XI - Toxicological Information

None relating to normal exposure.
Cancer lists

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>No</td>
<td>No</td>
<td>none</td>
</tr>
<tr>
<td>Sodium azide</td>
<td>No</td>
<td>No</td>
<td>none</td>
</tr>
<tr>
<td>Tetramethylbenzidine</td>
<td>No</td>
<td>No</td>
<td>none</td>
</tr>
<tr>
<td>Thimerosal</td>
<td>No</td>
<td>No</td>
<td>3</td>
</tr>
</tbody>
</table>

Section XII - Ecological Information

*Environmental Fate:* Biodegradable  
*Environmental Toxicity:* None

Section XIII - Disposal Considerations

Waste disposal is usually not restricted but local ordinances vary. Insure compliance with all government regulations.

Section XIV - Transportation Information

*DOT Shipping name:* phosphoric acid solution  
*DOT Hazard Class:* 8  
*Packaging Group:* III  
*DOT Hazard Label:* Corrosive  
*DOT Identification Number:* UN1805

Eligible to be shipped under ORM-D or limited quantity exemptions [49 CFR section 173.150(b)(2) and 173.150(C)].

Section XV - Regulatory Information

**Chemical Inventory Status**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sodium azide</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tetramethylbenzidine</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Thimerosal</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</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>RQ 261.33</td>
<td>TPQ 8(D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Weapons Convention</td>
<td>No</td>
<td>TSCA 12(b): No</td>
<td>CDTA: No</td>
<td></td>
</tr>
<tr>
<td>SARA 311/312: Acute:</td>
<td>No</td>
<td>Chronic: No, Fire: No</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: May 27, 2015