SECTION I PRODUCT IDENTIFICATION
PRODUCT NAME: SILVER PREP

SECTION II EMERGENCY OVERVIEW
Appearance: white crystalline granuals

Potential Health Effects
Eye: Causes severe eye irritation and possible injury.
Skin: Causes skin irritation. Some references state that citric acid has allergic properties but, no animal or human studies were found to support this claim. It does not seem likely that citric acid is a sensitizer since it is found in the body as an essential component of the citric acid cycle which re energy for physiological functions. Citric acid is widely distributed in plants and in animal tissues and fluids.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Excessive intake of citric acid may cause erosion of the teeth.
Inhalation: Causes respiratory tract irritation.
Chronic: Repeated exposure may cause erosion of teeth. Chronic exposure may cause effects similar to those of acute exposure.

SECTION III PRODUCT COMPONENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/EL</th>
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<tbody>
<tr>
<td>77-92-9</td>
<td>citric acid</td>
<td>&gt;94</td>
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<tr>
<td>7784-24-9</td>
<td>aluminum potassium sulfate</td>
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<td>231-598-3</td>
<td>sodium chloride</td>
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SECTION IV PHYSICAL DATA
Physical State: Crystalline powder
Vapor Pressure: 3.70E-009 mm Hg @ 25 deg C
Boiling Point: 175 deg C
Specific Gravity/Density: 1.665 g/cm3
Appearance: white
Odor: Odorless.
Evaporation Rate: Not available.
Freezing/Melting Point: 153 deg C
Decomposition Temperature: 175 deg C
pH: 1.7 (10% soln)
Viscosity: N/A
Solubility: 59.2% (20°C)

SECTION V FIRST AID MEASURES
Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.
Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion: Do NOT induce vomiting. 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.
Inhalation: Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
Notes to Physician: Treat symptomatically and supportively.

SECTION VI FIRE FIGHTING MEASURES
General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point: Not applicable.
Autoignition Temperature: 1010 deg C (1,850.00 deg F)
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated)
Health: 3; Flammability: 1; Instability: 0
SECTION VII ACCIDENTAL RELEASE MEASURES
General Information: Use proper personal protective equipment as indicated in Section VI. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Spill may be carefully neutralized with lime (calcium oxide, 

SECTION VIII HANDLING & STORAGE
Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Avoid ingestion and inhalation. Do not get in eyes. Avoid contact with skin and clothing.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from

SECTION IX EXPOSURE CONTROLS & PERSONAL PROTECTION
Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
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<tbody>
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<td>aluminum potassium sulfate</td>
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<tr>
<td>sodium chloride</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

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 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: The absence of published exposure limits does not mean that a substance poses no inhalation hazard. If inhalation exposure is likely to result in irritation or other symptoms are experienced, wear a NIOSH/MSHA or European Standard EN 149 approved respirator.

SECTION X STABILITY AND REACTIVITY
Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Dust generation, moisture.
Incompatibilities with Other Materials: Metal nitrates, strong oxidizing agents, strong reducing agents, strong bases, metals.
Hazardous Decomposition Products: Carbon monoxide, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION XI TRANSPORTATION INFORMATION
US DOT: N/A
Canada TDG: N/A
Shipping Name: Not Regulated
Hazard Class: N/A
UN Number: N/A

Creation Date: 11/2006
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