Section 1 - Product Identification

An aqueous solution of silver nitrate

Section II - Composition/Information on 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>silver nitrate</td>
<td>7761-88-8</td>
<td>0.01 mg/m3 TWA (Ag)</td>
<td>0.01 mg/m3 TWA (Ag)</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Section III - Hazards Identification

Overview: Soluble silver salts are toxic. Ingestion will cause chemical burns, as well as damage to the gastrointestinal tract. Convulsions and death may result.

Safety Ratings

Health: Hazardous  Flammability: None  Reactivity: Reactive (Oxidizer)  Contact: Slight

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

Storage: General storage

NFPA Ratings

Health = 2  Flammability = 0  Reactivity = 2

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 that of other soluble silver compounds.

Inhalation: Corrosive

Ingestion: Soluble silver salts are very toxic and ingestion causes chemical burns, nausea, vomiting, diarrhea, death etc.

Skin contact: Causes discoloration of the skin which may not be apparent until hours after contact.

Eye contact: Corrosive to the eye.

Chronic Exposure: Chronic exposure can cause silver poisoning including a permanent blue discoloration of the skin.

Aggravation of preexisting conditions: Unknown

Section IV - First Aid Measures

Inhalation: Unlikely to be a problem because of the low vapor pressure. Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: If the victim is conscious administer large amounts of water and get immediate medical attention. Do not 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, but silver nitrate is an oxidizer and can react with organic materials.
Explosion: Not Normally an explosion hazard.
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 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 II
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: 101°C
Vapor pressure (mm Hg): 18 @ 20°C
Vapor Density (air = 1): 0.6
Appearance and Odor: A clear, colorless liquid.
Density: 1.08 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>Silver Nitrate</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

Section XII - Ecological Information

Environmental Fate: Not biodegradable
Environmental Toxicity: Toxic to aquatic organisms
Section XIII - Disposal
Waste disposal of silver compounds is often restricted but local ordinances vary. Insure compliance with all government regulations. Silver compounds are often recycled because of their high economic value.

Section XIV - Transportation Information
Not Regulated

Section XV - Regulatory Information

Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Nitrate</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>Silver Nitrate</td>
<td>RQ No</td>
<td>TPQ No</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: Yes, Chronic: Yes, Fire: No</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: Mar. 30, 2006