SAFETY DATA SHEET
AMMONIACAL SILVER SOLUTION/GOMORI’S

Section 1 - Chemical Product and Company Identification

**SDS Name:** Ammoniacal Silver Solution/Gomori’s  
**Catalog Numbers:** SO-134A, MX-105-4  
**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923  
**For information, call:** 978-739-4883  
**Emergency Number:** 800-424-9300  
**For CHEMTREC assistance, call:** 800-424-9300

Section 2 - Hazards Identification

**GHS Classifications**

**HEALTH HAZARDS**

H302-Acute Oral Toxicity: 4  
H315-Skin Corrosion/Skin Irritation: 2  
H320-Eye damage/Irritation: 2B

**PHYSICAL HAZARDS**

H290-Corrosive to Metals: 1

**ENVIRONMETAL HAZARDS**

Aquatic acute environmental Hazards: Not classified  
Chronic environmental Hazards: Not classified

Pictograms or Hazard symbols and Hazard statement.

![Warning Symbol](image)  
Warnig: Causes skin irritation.  
Causes eye irritation.  
Harmful If swallowed.
Precautionary Statement

H315
P264- Wash thoroughly after handling.
P280- Wear protective gloves.
P302+P352- IF ON SKIN: Wash with plenty of soap and water.
P332+P313- If skin irritation occurs: Get medical advice/attention.
P362- Take off contaminated clothing and wash before reuse

H320
P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313- If eye irritation persists: Get medical advice/attention.

H290
P234- Keep only in original container.
P390- Absorb spillage to prevent material damage.
P406- Store in corrosive resistant/container with a resistant inner liner.

H302
P264- Wash thoroughly after handling.
P270- Do not eat, drink, or smoke when using this product.
P301 + P312- If swallowed, call a physician if you feel unwell.
P501- Dispose of contents/container in accordance with local/regional/national/international regulations.
P330- Rinse mouth.

Section 3 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7761-88-8</td>
<td>Silver Nitrate</td>
<td>4 w/v</td>
</tr>
<tr>
<td>1336-21-6</td>
<td>Ammonium Hydroxide</td>
<td>&lt; 1 v/v</td>
</tr>
<tr>
<td>1310-58-3</td>
<td>Potassium Hydroxide</td>
<td>1 v/v</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>95 v/v</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Oral Exposure: If Swallowing seek immediate medical advice.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes. **Extinguishing Media:** Use water spray, dry chemical powder, or appropriate foam. **Flash Point:** N/A

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**
Wear protective gear.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**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 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.
Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** Clear  
**Odor:** Ammonia  
**pH:** 13.8 (29% solution)  
**Vapor Pressure:** 115 @ 20°C for 10% solution; 580 @ 20°C for 28% solution.  
**Vapor Density:** 0.60 NH₃  
**Evaporation Rate:** N/A  
**Viscosity:** N/A  
**Boiling Point:** 118°C  
**Solubility:** Infinitely soluble

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.  
**Conditions to Avoid:** Heat, freezing.  
**Incompatibilities with Other Materials:** Chromic Acid, ethylene glycol, perchloric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, most metals (except aluminum), carbonates, hydroxides, oxides, and phosphates.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes.  
**Hazardous Polymerization:** Will not occur.

Section 11 - Toxicological Information

**RTECS#:**

**LD₅₀/LC₅₀:**  
CAS#1336-21-6  
Rat LD₅₀: 350mg/kg  
**Carcinogenicity:**  
CAS#1336-21-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**LD₅₀/LC₅₀:**  
CAS# 1310-58-3:  
Oral Rat: LD₅₀: 273 mg/kg.  
**Carcinogenicity:**  
CAS# 1310-58-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65
**LD50/LC50:**
CAS#: 7761-88-8 Silver Nitrate ORAL (LD50): Acute: 1173mg/kg [Rat] 50mg/kg [Mouse] 473mg/kg [Guinea pig]
LC50: Not Listed

**Carcinogenicity:**
CAS#7761-88-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

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**Section 12 - Ecological Information**

**Ecotoxicity:**

CAS# 1336-21-6. This material is expected to be slightly toxic to aquatic life. The LC50 0.1ppm 24 hours [Rainbow trout] 8.2mg/l 96 hours [Fathead minnow]. 0.1 ppm 48 hours [Bluegill]

**Environmental:** When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals.

**Physical:** No information available.

**Other:** No information available.

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**Section 13 - Disposal Considerations**

**Appropriate method of disposal of substance or preparation:**

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

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**Section 14 – Transport Information**

**DOT**
Non-Regulated

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**Section 15 - Regulatory Information**

**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**
Risk Phrases:

R22 Harmful by inhalation, in contact with skin and if swallowed
R36/38 Irritating to eyes and skin

Safety Phrases:

S20/21 When using do not eat, drink or smoke
S2 Keep out of the reach of children.
S 7 Keep container tightly closed.
S 9 Keep container in a well-ventilated place

MSDS Creation Date: 10/15/12
Revision #1. YM 5/15/2014 –Co-sing RC
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