

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

ENVIRONMENTAL HAZARDS

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

Pictograms or Hazard symbols and Hazard statement.



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

CAS#	Chemical Name	Percent
7761-88-8	Silver Nitrate	4 w/v
1336-21-6	Ammonium Hydroxide	< 1 v/v
1310-58-3	Potassium Hydroxide	1 v/v
7732-18-5	Water	95 v/v

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 @ 20C for 10% solution; 580 @ 20C 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.

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.

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.

Section 14 – Transport Information

DOT

Non-Regulated

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

Section 16 - Additional Information

MSDS Creation Date: 10/15/12

Revision #1. YM 5/15/2014 –Co-sing RC

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