

Material Safety Data Sheet

SILVER NITRATE, 2% pH 4.0

Section 1 - Chemical Product and Company Identification

MSDS Name: Silver Nitrate, 2% pH 4.0

Catalog Numbers: A-111-2, SO-1237

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

H312 Acute Dermal Toxicity: 4

H315 Skin Corrosion/ Skin irritation: 2

H319 Eye damage/ Irritation: 2A

H373 Specific Target Organ Toxicity: 2

PHYSICAL HAZARDS

H272 Oxidizer: 3

ENVIRONMENTAL HAZARDS

Aquatic acute environmental hazards: Not Classified

Chronic environmental hazards: Not Classified

Pictograms or Hazard symbols and Hazard statement



Warning! Harmful if swallowed



Warning! Harmful in contact with skin



Warning! Causes mild skin irritation



Warning! Causes serious eye irritation



Warning! May intensify fire; oxidizer



Warning! May cause to damage to following organs: mucous membranes, skin and eyes through repeated or prolonged exposure

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.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

H312

P280 Wear protective gloves, clothing, and eye and face protection.

P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

P312 Call a physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

H315

P332 + P313 If skin irritation occurs, get medical advice/attention

P362 Take off contaminated clothing and wash before reuse.

H319

P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.

P337 + P313 If eye irritation persists, get medical advice/attention.

H373

P260 Do not breathe fume/gas/mist/vapors.

P314 Get medical advice/attention if you feel unwell.

H272

P210 Keep away from heat, flames, and hot surfaces. No smoking.

P220 Store away from combustible materials. Incompatible with: reducing agents, easily oxidized materials, organic materials and metal powders.

P221 Take any precaution to avoid mixing with combustibles.

P370 + P378 In case of fire (see section 5)

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7761-88-8	Silver Nitrate	2 w/v
77-92-9	Citric Acid	0.03 v/v
7732-18-5	Water	100 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. Seek immediate medical advice.

Oral Exposure: If swallowed seek immediate medical advice.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

NFPA HEALTH 1 FLAMMABILITY 0 REACTIVITY 0

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.

Special Remarks on Fire hazards: Contact with combustible or organic materials

Extinguishing Media: Use water spray, dry chemical powder, or appropriate foam.

Flash Point: N/A

Auto ignition Temperature: N/A

Explosion Limits: N/A

Upper: N/A

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. Avoid contact with skin, eyes and clothing. Store at 4 degree C temperature.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Mechanical exhaust

Personal Protective Equipment:

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear

pH: 4.0

water

Vapor Pressure: 2.3 kPa @ 20deg. C

Vapor Density: 0.62 (Air=1)

Evaporation Rate: N/A

Viscosity: N/A

Boiling Point: 100 deg. C

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Hazardous Decomposition Products: Metal Oxide fume and nitrogen oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities with other material: Reducing agents, easily oxidized materials, organic materials and metal powders.

Section 11 - Toxicological Information

RTECS#: CAS#: 7761-88-8 RTECS# VW4725000

LD50/LC50:

CAS#: 7761-88-8 Silver Nitrate ORAL (LD50): Acute: 1173mg/kg [Rat] 50mg/kg [Mouse]
473mg/kg [Guinea pig]
LC50: Not Listed

CAS#: 77-92-9

Acute toxicity LD50 Oral - rat - 5,400 mg/kg (OECD Test Guideline 401) Inhalation: no data available LD50 Dermal - rat - > 2,000 mg/kg

Carcinogenicity:

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

Route of exposure:

Multiple routes: May cause irritation. May be harmful by inhalation, ingestion, or skin absorption.

Conditions aggravated by exposure:

The toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

CAS#7761-88-8 **No data 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

US Classification and label test

US Statements: Caution: Irritant, to skin and eyes.

United States Regulatory Information

SARA Listed: No

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.

DSL: no

NDSL: no

Risk Phrases:

R8 Contact with combustible material may cause fire

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R36/37/38 Irritating to eyes, respiratory system and skin

R48/21/22 Harmful: danger of serious damage to health by prolonged exposure in contact with skin or if swallowed.

Safety Phrases:

S26/28 In case of contact with eyes or skin, rinse immediately with plenty of water and seek medical advice

S36 Wear suitable protective clothing

S14 Keep away from reducing agents, easily oxidized materials, organic materials and metal powders.

Section 16 - Additional Information

MSDS Creation Date: January 22,2004

Revision # 7/18/14 YM-Co-sign RC.

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