

Revision Date: 10/16/2017

Version 1.4

1. PRODUCT AND COMPANY IDENTIFICATION

Part Number: 1142

1.1 Product Name: Grocott Methenamine Silver Set, GMS, Sol'n A: Silver Nitrate 1%, Aqueous

Part Number: 1142

CAS-No.: Not applicable

SDS Number: 4230

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: Newcomer Supply

2505 Parview Road

Middleton, WI 53562 USA

Telephone: 1-800-383-7799 **Fax:** 1-608-831-0866

Website: <u>www.newcomersupply.com</u>

Email: newly@newcomersupply.com

24 HOUR EMERGENCY CONTACT CALL CHEMTREC: 1-800-424-9300 Contact CHEMTREC only in the event of an emergency involving a chemical spill,

leak, fire, exposure or other accident.

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200)
Acute toxicity (oral), Category 4

Skin irritation, Category 2

Serious Eye Damage/Eye irritation, Category 2

2.2 GHS Label elements

Signal Word WARNING

Pictogram



Hazard Statement(s):

- · Harmful if swallowed
- · Causes skin irritation
- · Causes serious eve irritation

Precautionary Statement(s):

Prevention:

- · Wear protective gloves/protective clothing/eye protection/face protection.
- · Wash skin thoroughly after handling.
- · Do not eat, drink or smoke when using this product.

Response:

- · IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- · IF ON SKIN: Gently wash with plenty of soap and water.
- · Take off contaminated clothing and wash before reuse.
- · If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

- · If eye irritation persists get medical advice/attention.
- · IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- · Rinse mouth.
- · Specific treatment: see first aid measures in section 4.

Disposal:

- · Dispose of contents/ container to an approved waste disposal plant.
- 2.3 Description of any hazards not otherwise classified None



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2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Part Number: 1142

Hazardous Components

Component		Concentration
Name	Silver Nitrate	
CAS-No.	7761-88-8	1%

4. FIRST-AID MEASURES

4.1 Description of necessary measures

Inhalation (breathing)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Gently wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

Ingestion (swallowed)

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

Health Fire Reactivity hazard: 1 hazard: 0 hazard: 0

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area.

6.2 Methods and material for containment and cleaning up



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Apply personal protective equipment (see Section 8). Contain spill. Prevent further leakage if possible and safe to do so. Ensure proper ventilation. For small amounts, wipe or absorb spill using inert material and dispose of according to local regulations. For large amounts, evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Dispose of any contaminated materials according to local regulations.

7. HANDLING AND STORAGE

Part Number: 1142

7.1 Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities

Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Components with limit values that require monitoring at the workplace

Component	CAS-No.	Regulatory	Value	Parameters
Silver Nitrate	7761-88-8	OSHA PEL	TWA	0.01 mg/m ³
		ACGIH TLV	TWA	0.01 mg/m ³
		NIOSH REL	TWA	0.01 mg/m ³

8.2 Exposure Controls

Appropriate engineering controls

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises. Use product in an appropriately designated fume hood. Take measures to keep concentrations below acceptable limits.

8.3 Personal Protective Equipment

Eve/Face protection

Wear chemical safety goggles and/or a full face shield if splashing is possible. Keep eye wash fountain nearby.

Skin Protection

Wear chemical-resistant gloves. Gloves should be resistant to components of product. Refer to glove manufacturer for appropriate type and glove thickness.

Body Protection

No data available

Respiratory Protection

Respirators should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

In case of emergency, entry into or escape from unknown concentrations, select the highest level approved respiratory protection available.

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Clear, colorless liquid
Odor Odorless



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No data available Odor threshold Ηа No data available Melting point/freezing point No data available Initial boiling point and boiling range No data available No data available Flash point **Evaporation rate** No data available Flammability (solid, gas) No data available Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Vapor pressure No data available Vapor density No data available Relative density No data available Solubility(ies) Water soluble Partition coefficient: n-octanol/water No data available Auto-ignition temperature No data available No data available Decomposition temperature Viscosity No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Part Number: 1142

No data available

10.2 Chemical stability

Stable in a closed container within label-specified storage temperature and expiration date.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Keep away from combustible materials, heat, flame, and sparks.

10.5 Incompatible materials

Silver nitrate reacts with acetylene, in the presence of ammonia, to form silver acetylide, a sensitive and powerful detonator. Silver nitrate reacts violently with combustibles; chlorosulfonic acid and other acids (such as hydrochloric, sulfuric and nitric); metals; metal carbides; reducing agents (such as lithium, sodium, aluminum and their hydrides); and oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine). Silver nitrate is not compatible with ethylene oxide; charcoal; ammonium hydroxide; ethanol; aziridine; arsenic; sulfur; and many other compounds. Silver nitrate attacks some forms of plastic, rubber and coatings.

10.6 Hazardous decomposition products

Nitrogen oxide, oxygen, and silver oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Inhalation exposure

No data available

Oral exposure

No data available

Dermal exposure

No data available

Skin corrosion/irritation



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Contact with silver nitrate can severely irritate and burn the skin.

Serious eye damage/irritation

Contact with silver nitrate can severely irritate and burn the eyes with possible eye damage.

Respiratory or skin sensitization

No data available

Part Number: 1142

Germ Cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Acute toxicity

Silver Nitrate:

LD50 rat oral 1173 mg/kg

Carcinogencity

IARC: None of the components are listed NTP: None of the components are listed OSHA: None of the components are listed

Additional information

RTECS: No data available

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste disposal methods

Contents

Dispose of contents in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.



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14. TRANSPORT INFORMATION

14.1 DOT (US)

Part Number: 1142

UN-Number No data available
Proper shipping name No data available
Hazard class No data available
Packing group No data available
Environmental hazards No data available

15. REGULATORY INFORMATION

15.1 No data available

16. OTHER INFORMATION

Preparation Information Newcomer Supply Inc. 800-383-7799

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1. PRODUCT AND COMPANY IDENTIFICATION

Part Number: 1142

1.1 Product Name: Grocott Methenamine Silver Set, GMS Sol'n B: Methenamine Borate

Part Number: 1142

CAS-No.: Not applicable

SDS Number: 3480

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: Newcomer Supply

2505 Parview Road Middleton, WI 53562 USA

Telephone: 1-800-383-7799

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24 HOUR EMERGENCY CONTACT CALL CHEMTREC: 1-800-424-9300 Contact CHEMTREC only in the event of an emergency involving a chemical spill, leak, fire, exposure or other accident.

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200) Reproductive toxicity, Category 2 Skin sensitisation, Category 1 Acute toxicity (oral), Category 4

2.2 GHS Label elements

Signal Word WARNING

Pictogram



Hazard Statement(s):

- · Suspected of damaging fertility or the unborn child
- · May cause an allergic skin reaction
- · Harmful if swallowed

Precautionary Statement(s):

Prevention:

- · Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- · Wear protective gloves/protective clothing/eye protection/face protection.
- · Avoid breathing dust/fume/gas/mist/vapours/spray.
- · Contaminated work clothing should not be allowed out of the workplace.
- · Wash skin thoroughly after handling.
- · Do not eat, drink or smoke when using this product.

Response:

- · IF ON SKIN: Gently wash with plenty of soap and water.
- · Wash contaminated clothing before reuse.
- · If skin irritation or a rash occurs: Get medical advice/attention.
- $\cdot \text{ IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.} \\$
- · Rinse mouth.
- · Specific treatment: see first aid measures in section 4.
- · IF exposed or concerned: Get medical advice/attention.

Storage:

· Store locked up.

Disposal:

· Dispose of contents/ container to an approved waste disposal plant.

2.3 Description of any hazards not otherwise classified None



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2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Part Number: 1142

Hazardous Components

Component		Concentration
Name	Sodium Borate	
CAS-No.	7681-90-5	<1%
Name	Methenamine	
CAS-No.	100-97-0	<3%

4. FIRST-AID MEASURES

4.1 Description of necessary measures

Inhalation (breathing)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation or a rash occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

Ingestion (swallowed)

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

Health Fire Reactivity hazard: 1 hazard: 0 hazard: 0

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area.

6.2 Methods and material for containment and cleaning up



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7. HANDLING AND STORAGE

Part Number: 1142

7.1 Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities

Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Components with limit values that require monitoring at the workplace

Component	CAS-No.	Regulatory	Value	Parameters
Sodium Borate	7681-90-5	OSHA PEL	TWA	10 mg/m ³
		ACGIH TLV	TWA	2 mg/m ³
		ACGIH TLV	STEL	6 mg/m ³
		NIOSH REL	TWA	1 mg/m ³

8.2 Exposure Controls

Appropriate engineering controls

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises. Use product in an appropriately designated fume hood. Take measures to keep concentrations below acceptable limits.

8.3 Personal Protective Equipment

Eye/Face protection

Wear chemical safety goggles and/or a full face shield if splashing is possible. Keep eye wash fountain nearby.

Skin Protection

Wear chemical-resistant gloves. Gloves should be resistant to components of product. Refer to glove manufacturer for appropriate type and glove thickness.

Body Protection

No data available

Respiratory Protection

No data available

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Clear, colorless liquid

Odor Odorless

Odor threshold No data available pH No data available Melting point/freezing point No data available



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No data available Initial boiling point and boiling range Flash point No data available **Evaporation rate** No data available Flammability (solid, gas) No data available Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Vapor pressure No data available Vapor density No data available Relative density No data available Solubility(ies) Water soluble Partition coefficient: n-octanol/water No data available No data available Auto-ignition temperature Decomposition temperature No data available Viscosity No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Part Number: 1142

No data available

10.2 Chemical stability

Stable in a closed container within label-specified storage temperature and expiration date.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong acids, strong reducing agents, strong oxidizing agents, and sodium peroxide. May corrode some metals.

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation exposure

No data available

Oral exposure

No data available

Dermal exposure

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitization

Guinea pig - strong skin sensitizer

Germ Cell mutagenicity

No data available

Reproductive toxicity



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Developmental, subchronic and chronic toxicity studies show that the primary targets for borate toxicity are the developing fetus and the male reproductive system.

Specific target organ toxicity - single exposure

No data available

Part Number: 1142

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Acute toxicity

Sodium Borate:

LD50 rat oral 2660 mg/kg

Carcinogencity

IARC: None of the components are listed NTP: None of the components are listed OSHA: None of the components are listed

Additional information

RTECS: No data available

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste disposal methods

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Contaminated packaging

Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

14.1 DOT (US)

UN-Number
Proper shipping name
Hazard class
Packing group
Environmental hazards
No data available
No data available
No data available
No data available



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15. REGULATORY INFORMATION

15.1 No data available

16. OTHER INFORMATION

Part Number: 1142

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