

Part Number: 9171

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Steiner-Steiner Modified Silver Stain Kit
Part Number: 9171
CAS-No.: Not applicable
SDS Number: 6290
- 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: www.newcomersupply.com
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)
 Flammable liquid, Category 2
 Acute toxicity (oral), Category 2
 Acute toxicity (dermal), Category 4
 Acute toxicity (inhalation), Category 2
 Serious eye damage, Category 1
 Skin irritation, Category 2
 Skin sensitisation, Category 1
 Specific Target Organ Toxicity – Single exposure, Category 2
 Specific Target Organ Toxicity – Repeated exposure, Category 2
 Germ cell mutagenicity, Category 2
 Carcinogenicity, Category 2

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Highly flammable liquid and vapour
- Fatal if swallowed
- Harmful in contact with skin
- Fatal if inhaled
- Causes serious eye damage
- Causes skin irritation
- May cause an allergic skin reaction
- May cause damage to organs
- May cause damage to organs through prolonged or repeated exposure
- Suspected of causing genetic defects
- Suspected of causing cancer

Precautionary Statement(s):

Prevention:

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat/sparks/open flames/hot surfaces – No smoking.
- Keep container tightly closed.

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- Ground/bond container and receiving equipment.
- Use explosion-proof fume hood/electrical/ventilating/light equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- In case of inadequate ventilation wear respiratory protection.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Contaminated work clothing should not be allowed out of the workplace.

Response:

- In case of fire use carbon dioxide, dry chemical or alcohol-resistant foam.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.
- If skin irritation or a rash 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Rinse mouth.
- Specific treatment is urgent: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

- Keep container tightly closed.
- Store in a well ventilated place. Keep cool.
- Store locked up

Disposal:

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

2.3 Description of any hazards not otherwise classified None

2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS

See component SDS

4. FIRST-AID MEASURES

See component SDS

5. FIRE-FIGHTING MEASURES

See component SDS

6. ACCIDENTAL RELEASE MEASURES

See component SDS

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces – No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

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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

See component SDS

9. PHYSICAL AND CHEMICAL PROPERTIES

See component SDS

10. STABILITY AND REACTIVITY

See component SDS

11. TOXICOLOGICAL INFORMATION

See component SDS

12. ECOLOGICAL INFORMATION

See component SDS

13. DISPOSAL CONSIDERATIONS

See component SDS

14. TRANSPORT INFORMATION**14.1 DOT (US)****UN-Number****Proper shipping name****Hazard class****Packing group****Environmental hazards**

No data available

15. REGULATORY INFORMATION

See component SDS

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9171

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Steiner-Steiner Modified Silver Stain Kit, Sol'n A: Uranyl Nitrate 1%, Aqueous
- Part Number:** 9171
- CAS-No.:** Not applicable
- SDS Number:** 4570
- 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
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2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200)

Acute toxicity (oral), Category 2

Acute toxicity (inhalation), Category 2

Specific Target Organ Toxicity – Repeated exposure, Category 2

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Fatal if swallowed
- Fatal if inhaled
- May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s):

Prevention:

- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- In case of inadequate ventilation wear respiratory protection.

Response:

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Rinse mouth.
- Specific treatment is urgent: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

- Store in a well ventilated place. Keep container tightly closed.
- Store locked up.

Disposal:

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

2.3 Description of any hazards not otherwise classified None

2.4 >1% of mixture with unknown acute toxicity None

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3. COMPOSITION/INFORMATION ON INGREDIENTS
**3.2 Mixture
Hazardous Components**

Component		Concentration
Name	Uranyl Nitrate	
CAS-No.	13520-83-7	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. Immediately call a POISON CENTER or doctor/physician.

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. Immediately call a POISON CENTER or doctor/physician.

Ingestion (swallowed)

Rinse mouth. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

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
Uranyl Nitrate	13520-83-7	OSHA PEL	TWA	0.05 mg/m ³
		NIOSH REL	TWA	0.05 mg/m ³
		ACGIH TLV	TWA	0.2 mg/m ³
		ACGIH TLV	STEL	0.6 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.

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

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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). Uranyl Nitrate: Where the potential exists for exposure over 0.05 mg/m³: use a MSHA/NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus operated in a pressure-demand or other positive-pressure mode.

Exposure to 10 mg/m³ is immediately dangerous to life and health. If the possibility of exposure above 10 mg/m³ exists, use a MSHA/NIOSH approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive-pressure mode.

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	Colorless to pale yellow liquid; no precipitate
Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point/freezing point	ca. 0°C (ca. 32°F)
Initial boiling point and boiling range	ca. 100°C (ca. 32°F)
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	Similar to water
Solubility(ies)	Water soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY
10.1 Reactivity

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

Avoid exposure to heat, flame, and sparks.

10.5 Incompatible materials

Strong reducing agents and halogens

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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

No data available

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

Exposure to uranyl nitrate may damage the liver and kidneys. Repeated exposure may affect the brain.

Aspiration hazard

No data available

Acute toxicity

Uranyl nitrate:

LD50 rat intraperitoneal 135 mg/kg

LD50 chicken subcutaneous 299 mg/kg

Carcinogenicity

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

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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.

14. TRANSPORT INFORMATION**14.1 DOT (US)****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

www.newcomersupply.com

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Part Number: 9171

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** **Steiner-Steiner Modified Silver Stain Kit, Sol'n B: Silver Nitrate 1%, Aqueous**
Part Number: 9171
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: www.newcomersupply.com
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 eye 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

Part Number: 9171

2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.2 Mixture
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

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

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

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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Odor threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
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
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

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

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

Carcinogenicity

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

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14. TRANSPORT INFORMATION

14.1 DOT (US)	
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
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www.newcomersupply.com
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Part Number: 9171

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Steiner-Steiner Modified Silver Stain Kit, Sol'n, C: Gum Mastic 2.5%, Alcoholic
- Part Number:** 9171
- CAS-No.:** Not applicable
- SDS Number:** 3110
- 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
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2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**
GHS Classification, (in accordance with 29 CFR1910.1200)
Flammable liquid, Category 2
Acute toxicity (oral), Category 4
Acute toxicity (dermal), Category 4
Acute toxicity (inhalation), Category 4
Serious Eye Damage/Eye irritation, Category 2A
Skin irritation, Category 2
Specific Target Organ Toxicity – Single exposure, Category 2

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Highly flammable liquid and vapour
- Harmful if swallowed
- Harmful in contact with skin
- Harmful if inhaled
- Causes serious eye irritation
- Causes skin irritation
- May cause damage to organs

Precautionary Statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces – No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof fume hood/electrical/ventilating/light equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapours/spray

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Response:

- In case of fire use carbon dioxide, dry chemical or alcohol-resistant foam.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing 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.
- IF exposed or concerned: Get medical advice/attention.

Storage:

- Store in a well ventilated place. Keep cool.
- Store locked up.

Disposal:

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

- 2.3 Description of any hazards not otherwise classified** None
- 2.4 >1% of mixture with unknown acute toxicity** None

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances
Hazardous Components

Component		Concentration
Name	Ethyl Alcohol	
CAS-No.	64-17-5	87-88%
Name	Methyl Alcohol	
CAS-No.	67-56-1	4-5%
Name	Isopropyl Alcohol	
CAS-No.	67-63-0	4-5%

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. IF exposed or concerned: Get medical advice/attention.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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.

Part Number: 9171

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: 2	hazard: 3	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. Keep product away from heat, flame, ignition sources, and reactive materials. Avoid accumulation of vapor to form explosive concentration. Pay particular attention to low areas where vapor accumulates more easily.

6.2 Methods and material for containment and cleaning up

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. Eliminate sources of ignition.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces – No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

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
Ethyl Alcohol	64-17-5	OSHA PEL	TWA	1000 ppm (1900 mg/m ³)
		ACGIH TLV	TWA	1000 ppm (1880 mg/m ³)
		NIOSH REL	TWA	1000 ppm (1900 mg/m ³)

Component	CAS-No.	Regulatory	Value	Parameters
Methyl Alcohol	67-56-1	OSHA PEL	TWA	200 ppm (980 mg/m ³)

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		ACGIH TLV	STEL	200 ppm (1,230 mg/m ³)
		ACGIH TLV	STEL	50 ppm (1,230 mg/m ³)
		NIOSH REL	TWA	200 ppm (980 mg/m ³)
		NIOSH REL	STEL	250 ppm (980 mg/m ³)

Component	CAS-No.	Regulatory	Value	Parameters
Isopropyl Alcohol	67-63-0	OSHA PEL	TWA	400 ppm (980 mg/m ³)
		ACGIH TLV	TWA	400 ppm (983 mg/m ³)
		ACGIH TLV	STEL	500 ppm (1,230 mg/m ³)
		NIOSH REL	TWA	400 ppm (980 mg/m ³)
		NIOSH REL	STEL	500 ppm (980 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

Respirators should only be used if the employer has implemented 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).

Ethyl Alcohol: Where the potential exists for exposure over 1,000 ppm: use a NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus or an emergency escape air cylinder.

Exposure to 3,300 ppm is immediately dangerous to life and health. If the possibility of exposure above 3,300 ppm exists, use a NIOSH approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive-pressure mode equipped with an emergency escape air cylinder.

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

Translucent, light tan-peach liquid

Part Number: 9171

Odor	Alcoholic odor
Odor threshold	No data available
pH	No data available
Melting point/freezing point	-114°C (-173.2°F) (Ethyl Alcohol)
Initial boiling point and boiling range	78-80°C (172-176°F) (Ethyl Alcohol)
Flash point	13°C (55.4°F) Closed cup
Evaporation rate	1.7 (Ethyl Alcohol)
Flammability (solid, gas)	Liquid is flammable
Upper flammability or explosive limits	19% (Ethyl Alcohol)
Lower flammability or explosive limits	3.3% (Ethyl Alcohol)
Vapor pressure	No data available
Vapor density	1.6 (Ethyl Alcohol)
Relative density	0.789 (Ethyl Alcohol)
Solubility(ies)	Water soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

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

Heat, sparks, open flame, and ignition sources.

10.5 Incompatible materials

Strong oxidizers, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium concentrated sulfuric acid, potassium and hydrogen peroxides, platinum black, calcium hypochlorite, silver oxide, ammonia, nitric acid, mercuric nitrate, silver nitrate, magnesium perchlorate, isocyanates, mineral acids, and chloroform.

10.6 Hazardous decomposition products

Carbon dioxide and carbon monoxide may be released if product is heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation exposure

Inhaling ethyl alcohol, methyl alcohol, and isopropyl alcohol can irritate the nose, throat and lungs causing coughing and/or shortness of breath.

Oral exposure

Oral exposure to ethyl alcohol, methyl alcohol, and isopropyl alcohol can cause headache, drowsiness, nausea and vomiting, and unconsciousness. It can also affect concentration and vision.

Dermal exposure

Contact with ethyl alcohol can irritate the skin.

Skin corrosion/irritation

Part Number: 9171

Prolonged or repeated exposure to ethyl alcohol can cause drying and cracking of the skin with peeling, redness and itching.

Serious eye damage/irritation

Contact with ethyl alcohol can irritate the eyes.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Reproductive toxicity

Repeated oral exposure to ethyl alcohol may cause spontaneous abortions, as well as birth defects and other developmental problems. This condition is referred to as "fetal alcohol syndrome." There is limited evidence that oral exposure to ethyl alcohol may decrease fertility in males.

Specific target organ toxicity - single exposure

Exposure to ethyl alcohol may affect the liver and the nervous system.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Acute toxicity

Ethyl Alcohol:

LD50 rat oral 3450 mg/kg

LD50 mouse oral 7060 mg/kg

LC50 rat inhalation 20000 ppm/10H

LC50 mouse inhalation 20363 ppm/4H

Carcinogenicity

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

Part Number: 9171

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.

14. TRANSPORT INFORMATION**14.1 DOT (US)****UN-Number****Proper shipping name****Hazard class****Packing group****Environmental hazards**

No data available

15. REGULATORY INFORMATION**15.1** No data available**16. OTHER INFORMATION**

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9171

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Steiner-Steiner Modified Silver Stain Kit, Sol'n D: Hydroquinone, Powder
Part Number: 9171
CAS-No.: 123-31-9
SDS Number: 3320

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: www.newcomersupply.com

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

Serious eye damage, Category 1

Skin sensitisation, Category 1

Germ cell mutagenicity, Category 2

Carcinogenicity, Category 2

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Harmful if swallowed
- May cause an allergic skin reaction
- Causes serious eye damage
- Suspected of causing genetic defects
- Suspected of causing cancer

Precautionary Statement(s):

Prevention:

- Wash skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood

Response:

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF exposed or concerned: Get medical advice/attention

Storage:

- Store locked up

Disposal:

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

Part Number: 9171

2.3 Description of any hazards not otherwise classified None

2.4 >1% of mixture with unknown acute toxicity None

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances
Hazardous Components

Component		Concentration
Name	Hydroquinone	
CAS-No.	123-31-9	99-100%

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. Immediately call a POISON CENTER or doctor/physician.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion (swallowed)

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

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 hazard:	2	Fire hazard:	1	Reactivity hazard:	0
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6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Part Number: 9171

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

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
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
Hydroquinone	123-31-9	OSHA PEL	TWA	2 mg/m ³
		ACGIH TLV	TWA	2 mg/m ³
		NIOSH REL	C	2 mg/m ³ (15 minutes)

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

Colorless, fine crystalline solid

Part Number: 9171

Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point/freezing point	170°C (338°F)
Initial boiling point and boiling range	285°C (545 °F)
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	1.332
Relative density	No data available
Solubility(ies)	Water soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong bases and strong oxidizing agents

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

Contact can irritate the skin and cause a rash and changes in skin color.

Serious eye damage/irritation

Hydroquinone can irritate and may burn the eyes.

Respiratory or skin sensitization

No data available

Germ Cell mutagenicity

Part Number: 9171

No data available

Reproductive toxicity

Hydroquinone may decrease fertility in males and females.

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

No data available

Carcinogenicity

IARC: Group 3, not classifiable as to its carcinogenicity to humans

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.

14. TRANSPORT INFORMATION
14.1 DOT (US)

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

Part Number: 9171

15. REGULATORY INFORMATION**15.1** No data available**16. OTHER INFORMATION**

Preparation Information

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