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

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.

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.


2.3 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

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)**

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>Proper shipping name</th>
<th>Hazard class</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

15. **REGULATORY INFORMATION**

See component SDS

16. **OTHER INFORMATION**

Preparation Information
Newcomer Supply Inc.
800-383-7799
www.newcomersupply.com
Copyright © Newcomer Supply Inc. All rights reserved.
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
              Website: www.newcomersupply.com
              Email: newly@newcomersupply.com

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
3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Hazardous Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Uranyl Nitrate</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>13520-83-7</td>
</tr>
</tbody>
</table>

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: 1  Fire: 0  Reactivity: 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
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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Regulatory Parameter</th>
<th>Value</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uranyl Nitrate</td>
<td>13520-83-7</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
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<td></td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>STEL</td>
<td>0.6 mg/m³</td>
</tr>
</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
</tr>
<tr>
<td><strong>pH</strong></td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
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<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
</tr>
<tr>
<td><strong>Upper flammability or explosive limits</strong></td>
</tr>
<tr>
<td><strong>Lower flammability or explosive limits</strong></td>
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<tr>
<td><strong>Vapor pressure</strong></td>
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<tr>
<td><strong>Vapor density</strong></td>
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<tr>
<td><strong>Relative density</strong></td>
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<tr>
<td><strong>Solubility(ies)</strong></td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
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<tr>
<td><strong>Auto-ignition temperature</strong></td>
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<tr>
<td><strong>Decomposition temperature</strong></td>
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<tr>
<td><strong>Viscosity</strong></td>
</tr>
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</table>

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>10.1 Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>10.2 Chemical stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable in a closed container within label-specified storage temperature and expiration date.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.3 Possibility of hazardous reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.4 Conditions to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid exposure to heat, flame, and sparks.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.5 Incompatible materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong reducing agents and halogens</td>
</tr>
</tbody>
</table>
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
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)

<table>
<thead>
<tr>
<th>UN-Number</th>
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</thead>
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<td>Proper shipping name</td>
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<td>Hazard class</td>
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<tr>
<td>Packing group</td>
<td>No data available</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No data available</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

15.1 No data available

16. OTHER INFORMATION

Preparation Information
Newcomer Supply Inc.
800-383-7799
www.newcomersupply.com
Copyright © Newcomer Supply Inc. All rights reserved.
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  

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 ![ ](image)  

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
2.4 >1% of mixture with unknown acute toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture
Hazardous Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>Name</td>
<td>CAS-No.</td>
</tr>
<tr>
<td>Silver Nitrate</td>
<td>7761-88-8</td>
</tr>
<tr>
<td></td>
<td>1%</td>
</tr>
</tbody>
</table>

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
<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>hazard: 1</td>
<td>hazard: 0</td>
<td>hazard: 0</td>
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</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Regulatory</th>
<th>Value</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Nitrate</td>
<td>7761-88-8</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
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<td></td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
</tr>
</tbody>
</table>

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
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
No data available
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**
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)

<p>| | |</p>
<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-Number</td>
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<td>Proper shipping name</td>
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<tr>
<td>Hazard class</td>
<td>No data available</td>
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<td>Packing group</td>
<td>No data available</td>
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<tr>
<td>Environmental hazards</td>
<td>No data available</td>
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</table>

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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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
   Website: www.newcomersupply.com
   Email: newly@newcomersupply.com

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

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.
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

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Ethyl Alcohol</td>
</tr>
<tr>
<td>CAS-No. 64-17-5</td>
<td>87-88%</td>
</tr>
<tr>
<td>Name</td>
<td>Methyl Alcohol</td>
</tr>
<tr>
<td>CAS-No. 67-56-1</td>
<td>4-5%</td>
</tr>
<tr>
<td>Name</td>
<td>Isopropyl Alcohol</td>
</tr>
<tr>
<td>CAS-No. 67-63-0</td>
<td>4-5%</td>
</tr>
</tbody>
</table>

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.
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: 3  Reactivity 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

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Regulatory</th>
<th>Value</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>1000 ppm (1900 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>1000 ppm (1880 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>1000 ppm (1900 mg/m³)</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>67-56-1</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>200 ppm (980 mg/m³)</td>
</tr>
</tbody>
</table>
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
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
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
Copyright © Newcomer Supply Inc. All rights reserved.
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

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.

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.
2.3 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

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Hydroquinone</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>123-31-9</td>
</tr>
<tr>
<td>Concentration</td>
<td>99-100%</td>
</tr>
</tbody>
</table>

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 2 Fire 1 Reactivity 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
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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Regulatory</th>
<th>Value</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroquinone</td>
<td>123-31-9</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>C</td>
<td>2 mg/m³ (15 minutes)</td>
</tr>
</tbody>
</table>

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

SAFETY DATA SHEET (SDS)
Revision Date: 10/16/2017
Version 1.4

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: Water soluble
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
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

Hydroquinone may decrease fertility in males and females.
15. REGULATORY INFORMATION

15.1 No data available

16. OTHER INFORMATION

Preparation Information
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800-383-7799
www.newcomersupply.com
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