

Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Reticulum, Gordon & Sweets Stain Kit
Part Number: 9168
CAS-No.: Not applicable
SDS Number: 6270

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: NEWCOMER SUPPLY
 1020 PRAIRIE VIEW CT
 WAUNAKEE WI 53597-8512

Telephone: 1-800-383-7799

Fax: 1-608-831-0866

Website: www.newcomersupply.com

Email: info@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)

Skin corrosion, Category 1

Serious eye damage, Category 1

Acute toxicity (oral), Category 4

Acute toxicity (inhalation), Category 4

Corrosive to metals, Category 1

Skin sensitisation, Category 1

Germ cell mutagenicity, Category 2

Carcinogenicity, Category 1A

Specific Target Organ Toxicity – Single exposure, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Causes severe skin burns and eye damage
- Harmful if swallowed
- Harmful if inhaled
- May be corrosive to metals
- May cause an allergic skin reaction
- Suspected of causing genetic defects
- May cause cancer
- Causes damage to organs

Precautionary Statement(s):

Prevention:

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep only in original container.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash skin thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.

Response:

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- Absorb spillage to prevent material damage.
- 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: Rinse mouth. Do NOT induce vomiting.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

- Store locked up.
- Store in a corrosive resistant container/container with a resistant inner liner.

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

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

See component SDS

9. PHYSICAL AND CHEMICAL PROPERTIES

See component SDS

10. STABILITY AND REACTIVITY

See component SDS

11. TOXICOLOGICAL INFORMATION

See component SDS

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12. ECOLOGICAL INFORMATION

See component SDS

13. DISPOSAL CONSIDERATIONS

See component SDS

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

See component SDS

16. OTHER INFORMATION

Preparation Information
Newcomer Supply Inc.
800-383-7799
www.newcomersupply.com
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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n A: Potassium Permanganate 1%, Aqueous
- Part Number:** 9168
- CAS-No.:** Not applicable
- SDS Number:** 4090
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
1020 PRAIRIE VIEW CT
WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** www.newcomersupply.com
- Email:** info@newcomersupply.com

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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
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

2.2 GHS Label elements

Signal Word WARNING

Pictogram



Hazard Statement(s):

- Harmful if swallowed
- Toxic to aquatic life with lasting effects

Precautionary Statement(s):

Prevention:

- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.

Response:

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

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

| Component | | Concentration |
|-----------|------------------------|---------------|
| Name | Potassium Permanganate | |
| CAS-No. | 7722-64-7 | 1% |

4. FIRST-AID MEASURES

Part Number: 9168

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. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Get medical advice/attention if you feel unwell.

Eye Contact

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

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 | Other | Oxidizer |
| 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. 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

Part Number: 9168

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 |
|------------------------|-----------|------------|-------|------------------------|
| Potassium Permanganate | 7722-64-7 | OSHA PEL | TWA | 5 mg/m ³ |
| | | ACGIH TLV | TWA | 0.03 mg/m ³ |
| | | NIOSH REL | TWA | 1 mg/m ³ |
| | | NIOSH REL | STEL | 3 mg/m ³ |
| | | CANADA/QC | TWA | 0.2 mg/m ³ |
| | | CANADA/ON | TWA | 0.2 mg/m ³ |
| | | CANADA/BC | TWA | 0.2 mg/m ³ |
| | | CANADA/AB | TWA | 0.2 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 | Purple liquid |
| Odor | Odorless |
| Odor threshold | No data available |

Part Number: 9168

| | |
|---|--------------------------|
| pH | No data available |
| Melting point/freezing point | -2°C (28°F) |
| Initial boiling point and boiling range | 102°C (215 °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 | No data available |
| Solubility(ies) | Completely 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

No data available

10.5 Incompatible materials

Potassium permanganate in contact with certain sulfoxides; aldehydes; strong acids (such as hydrochloric, sulfuric and nitric); amines; or glycols may result in fires. Potassium permanganate is not compatible with strong bases (such as sodium hydroxide and potassium hydroxide); finely powdered metals; peroxides; and aluminum, zinc, lead, and copper and their alloys.

10.6 Hazardous decomposition products

Metal fumes

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 with potassium permanganate can severely irritate and burn the skin.

Serious eye damage/irritation

Contact with potassium permanganate can severely irritate and burn the eyes with possible eye damage.

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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

Potassium Permanganate:

LD50 rat oral 750 mg/kg

LD50 mouse oral 2157 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)**

Part Number: 9168

| | |
|-----------------------------|---------------|
| UN-Number | Not regulated |
| Proper shipping name | Not regulated |
| Hazard class | Not regulated |
| Packing group | Not regulated |

| | |
|------------------------------|------------------|
| Environmental hazards | Marine pollutant |
|------------------------------|------------------|


15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Permanganic acid (HMnO4), potassium salt (7722-64-7): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

No data available

Canada NPRI (Supplier Notification Required): Listed Substance

No data available

Export Control List (CEPA, 1999, Schedule 3)

No data available

Non-Regulatory Instruments

No data available

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

No data available

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Reticulum, Gordon & Sweets Stain Kit, Sol'n B: Oxalic Acid 1%, Aqueous
Part Number: 9168
CAS-No.: Not applicable
SDS Number: 3690

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: NEWCOMER SUPPLY
 1020 PRAIRIE VIEW CT
 WAUNAKEE WI 53597-8512

Telephone: 1-800-383-7799

Fax: 1-608-831-0866

Website: www.newcomersupply.com

Email: info@newcomersupply.com

24 HOUR EMERGENCY CONTACT
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 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)
 Skin irritation, Category 2
 Serious Eye Damage/Eye irritation, Category 2

2.2 GHS Label elements

Signal Word WARNING

Pictogram



Hazard Statement(s):

- 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.

Response:

- IF ON SKIN: Gently wash with soap and water.
- Take off contaminated clothing and wash before reuse.
- If skin irritation occurs: Get medical advice/attention.
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- If eye irritation persists get medical advice/attention.
- Specific treatment: see first aid measures in section 4.

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

| Component | | Concentration |
|-----------|-------------|---------------|
| Name | Oxalic Acid | |
| CAS-No. | 144-62-7 | 1% |

4. FIRST-AID MEASURES

Part Number: 9168

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 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 continuously 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: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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.

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

Part Number: 9168

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 |
|-------------|----------|------------|-------|---------------------|
| Oxalic acid | 144-62-7 | OSHA PEL | TWA | 1 mg/m ³ |
| | | ACGIH TLV | TWA | 1 mg/m ³ |
| | | ACGIH TLV | STEL | 2 mg/m ³ |
| | | NIOSH REL | TWA | 1 mg/m ³ |
| | | NIOSH REL | STEL | 2 mg/m ³ |
| | | CANADA/QC | TWA | 1 mg/m ³ |
| | | CANADA/QC | STEL | 2 mg/m ³ |
| | | CANADA/ON | TWA | 1 mg/m ³ |
| | | CANADA/ON | STEL | 2 mg/m ³ |
| | | CANADA/BC | TWA | 1 mg/m ³ |
| | | CANADA/BC | STEL | 2 mg/m ³ |
| | | CANADA/AB | TWA | 1 mg/m ³ |
| | | CANADA/AB | STEL | 2 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

Part Number: 9168

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).

Oxalic Acid: Where the potential exists for exposure over 1 mg/m³: use a NIOSH approved full facepiece, negative pressure, air-purifying, particulate filter respirator with an N, R or P100 filter. More protection is provided by a full facepiece respirator than by a half-mask respirator, and even greater protection is provided by a powered-air purifying respirator.

Where the potential exists for exposure over 50 mg/m³: 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 500 mg/m³: is immediately dangerous to life and health. If the possibility of exposure above 500 mg/m³ 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 | Clear, colorless solution |
| Odor | No data available |
| 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) | Completely 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

Part Number: 9168

10.4 Conditions to avoid

Heat, sparks, open flame, and ignition sources.

10.5 Incompatible materials

Oxalic acid reacts violently with oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); furfuryl alcohol; and chlorites to cause fires and explosions. Oxalic acid will react with silver and silver compounds to form explosive silver oxalate. Oxalic acid is not compatible with strong acids (such as hydrochloric, sulfuric and nitric); strong bases (such as sodium hydroxide and potassium hydroxide); alkali metals (such as lithium, sodium and potassium); and acid chlorides. Store in tightly closed containers in a cool, well-ventilated area away from moisture and combustibles. Oxalic acid corrodes steel.

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 with oxalic acid can severely irritate and burn the skin.

Serious eye damage/irritation

Contact with oxalic acid 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

No data available

Carcinogenicity

IARC: None of the components are listed

NTP: None of the components are listed

OSHA: None of the components are listed

Additional information

Part Number: 9168

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 | Not regulated |
| Proper shipping name | Not regulated |
| Hazard class | Not regulated |
| Packing group | Not regulated |
| Environmental hazards | Not regulated |

15. REGULATORY INFORMATION

- 15.1 Canadian Regulations**
 This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status
 Oxalic Acid - Ethanedioic Acid (144-62-7): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance
 Not listed

Canada NPRI (Supplier Notification Required): Listed Substance
 Not listed

Export Control List (CEPA, 1999, Schedule 3)
 Not listed

Non-Regulatory Instruments
 Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Part Number: 9168

Not listed

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n C: Ferric Ammonium Sulfate 2.5%, Aqueous
- Part Number:** 9168
- CAS-No.:** Not applicable
- SDS Number:** 2840
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
1020 PRAIRIE VIEW CT
WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** www.newcomersupply.com
- Email:** info@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)
None
- 2.2 GHS Label elements**
- Signal Word** NONE
- Pictogram**
- Hazard Statement(s):**
· None
- Precautionary Statement(s):**
· None
- 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

| Component | | Concentration |
|-----------|-------------------------|---------------|
| Name | Ferric Ammonium Sulfate | |
| CAS-No. | 10138-04-2 | 2.5% |

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. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention.

Eye Contact

Part Number: 9168

IF IN EYES: Rinse continuously 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: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel

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: 0 | 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.

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

Does not contain components with occupational exposure limits.

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.

Part Number: 9168

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 to pale purple liquid |
| 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 | Evap. rate of water = 1; 1 |
| Flammability (solid, gas) | No data available |
| Upper flammability or explosive limits | No data available |
| Lower flammability or explosive limits | No data available |
| Vapor pressure | 18 mm Hg at 20°C |
| Vapor density | For water in air = 1; 1 |
| 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 | 1.222 (mPa)(s) at 20°C |

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

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Part Number: 9168

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

No data available

Aspiration hazard

No data available

Acute toxicity

No data available

Carcinogenicity

IARC: None of the components are listed

IARC: None of the components are listed

IARC: 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

Part Number: 9168

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 | Not regulated |
| Proper shipping name | Not regulated |
| Hazard class | Not regulated |
| Packing group | Not regulated |
| Environmental hazards | Not regulated |

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Ferric Ammonium Sulfate - Sulfuric acid, ammonium iron(3+) salt (2:1:1) (10138-04-2): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

No data available

Canada NPRI (Supplier Notification Required): Listed Substance

No data available

Export Control List (CEPA, 1999, Schedule 3)

No data available

Non-Regulatory Instruments

No data available

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

No data available

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n D: Silver Nitrate 10%, Aqueous
Part Number: 9168
CAS-No.: Not applicable
SDS Number: 4250
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
 1020 PRAIRIE VIEW CT
 WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
Fax: 1-608-831-0866
Website: www.newcomersupply.com
Email: info@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 corrosion, Category 1
 Serious eye damage, Category 1
 Acute aquatic toxicity, Category 1
 Chronic aquatic toxicity, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Harmful if swallowed
- Causes severe skin burns and eye damage
- Very toxic to aquatic life with lasting effects

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.
- Do not breathe dust/fume/gas/mist/vapors/spray.

Response:

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- Wash contaminated clothing before reuse.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

Part Number: 9168

· 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**

| Component | | Concentration |
|-----------|----------------|---------------|
| Name | Silver Nitrate | |
| CAS-No. | 7761-88-8 | 10% |

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 [or shower]. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse continuously 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: Rinse mouth. Do NOT induce vomiting. 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: | 1 | Fire hazard: | 0 | Reactivity hazard: | 0 | Other | Oxidizer |
|----------------|---|--------------|---|--------------------|---|-------|----------|

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Part Number: 9168

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 |
|----------------|-----------|-----------------|-------|------------------------|
| 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 |
| | | CANADA/QC | TWA | 0.01 mg/m ³ |
| | | CANADA/ON TWAEV | TWA | 0.01 mg/m ³ |
| | | CANADA/BC | TWA | 0.01 mg/m ³ |
| | | CANADA/BC | TWA | 0.03 mg/m ³ |
| | | CANADA/AB | 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

Part Number: 9168

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 |
| 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

Part Number: 9168

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 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

Part Number: 9168

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

UN3082

Proper shipping name

Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate)


Hazard class

9

Packing group

III

Environmental hazards

Marine Pollutant

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Silver Nitrate - Nitric acid silver(1+) salt (7761-88-8): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Not listed

Canada NPRI (Supplier Notification Required): Listed Substance

Not listed

Export Control List (CEPA, 1999, Schedule 3)

Not listed

Non-Regulatory Instruments

Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

16. OTHER INFORMATION
Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|-----------------------------|--|--|
| 1.1 Product Name: | Reticulum, Gordon & Sweets Stain Kit, Sol'n E: Ammonium Hydroxide 28-30%, ACS | 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. |
| Part Number: | 9168 | |
| CAS-No.: | Not applicable | |
| SDS Number: | 2320 | |
| 1.2 Recommended Use: | Laboratory Chemicals | |
| 1.3 Company: | NEWCOMER SUPPLY 1020 PRAIRIE VIEW CT WAUNAKEE WI 53597-8512 | |
| Telephone: | 1-800-383-7799 | |
| Fax: | 1-608-831-0866 | |
| Website: | www.newcomersupply.com | |
| Email: | info@newcomersupply.com | |

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification, (in accordance with 29 CFR1910.1200)
 Corrosive to metals, Category 1
 Skin corrosion, Category 1B
 Serious eye damage, Category 1
 Acute toxicity (oral), Category 4

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- May be corrosive to metals
- Causes severe skin burns and eye damage
- May be harmful if swallowed

Precautionary Statement(s):

Prevention:

- Keep only in original container/packaging.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash skin thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Do not eat, drink or smoke when using this product.

Response:

- Absorb spillage to prevent material damage.
- 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 [or shower].
- Wash contaminated clothing before reuse.
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

Part Number: 9168

- Store locked up.
- Store in a corrosive resistant container/container with a resistant inner liner.

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**

| Component | | Concentration |
|-----------|--------------------|---------------|
| Name | Ammonium Hydroxide | |
| CAS-No. | 1336-21-6 | 28-30% |

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 [or shower]. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse continuously 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: Rinse mouth. Do NOT induce vomiting. 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: | 3 | Fire hazard: | 1 | Reactivity hazard: | 0 |
|----------------|---|--------------|---|--------------------|---|

6. ACCIDENTAL RELEASE MEASURES

Part Number: 9168

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

| Component | CAS-No. | Regulatory | Value | Parameters |
|--------------------|-----------|------------|-------|------------|
| Ammonium Hydroxide | 1310-73-2 | OSHA PEL | TWA | 50 ppm |
| | | NIOSH REL | TWA | 25 ppm |
| | | NIOSH REL | STEL | 35 ppm |
| | | ACGIH TLV | TWA | 25 ppm |
| | | ACGIH TLV | STEL | 35 ppm |
| | | CANADA/QC | TWA | 25 ppm |
| | | CANADA/QC | STEL | 35 ppm |
| | | CANADA/ON | TWA | 25 ppm |
| | | CANADA/ON | STEL | 35 ppm |
| | | CANADA/BC | TWA | 25 ppm |
| | | CANADA/BC | STEL | 35 ppm |
| | | CANADA/AB | TWA | 25 ppm |
| | | CANADA/AB | STEL | 35 ppm |

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.

Part Number: 9168

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).

Where the potential exists for exposure over 25 ppm: use a NIOSH approved full facepiece respirator with an acid gas cartridge which is specifically approved for ammonium hydroxide.

Where the potential for high exposure exists, 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.

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 liquid |
| Odor | Pungent ammonia odor |
| Odor threshold | No data available |
| pH | No data available |
| Melting point/freezing point | ca. -72°C (ca. -98°F) |
| Initial boiling point and boiling range | ca. 36°C (ca. 97°F) |
| Flash point | No data available |
| Evaporation rate | No data available |
| Flammability (solid, gas) | No data available |
| Upper flammability or explosive limits | 25% |
| Lower flammability or explosive limits | 16% |
| Vapor pressure | No data available |
| Vapor density | No data available |
| Relative density | ~0.9 |
| 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

No data available

Part Number: 9168

10.5 Incompatible materials

Ammonium hydroxide reacts with many heavy metals (such as silver, copper, lead and zinc) and their salts to form explosive compounds and flammable and explosive hydrogen gas. Ammonium hydroxide may react violently with strong acids (such as hydrochloric, sulfuric and nitric); dimethyl sulfate; and halogens. Ammonium hydroxide will react with strong bases (such as sodium hydroxide and potassium hydroxide) to produce ammonia gas. Do not use copper, aluminum or galvanized metals when handling ammonium hydroxide

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

Ammonium hydroxide: Contact can severely irritate and burn the skin.

Serious eye damage/irritation

Ammonium hydroxide: Contact can severely irritate and burn the eyes.

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

Ammonium Hydroxide:
LD50 rat oral 350 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

Part Number: 9168

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

UN2672

Proper shipping name

Ammonia solutions


Hazard class

8

Packing group

III

Environmental hazards

No data available

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Ammonium Hydroxide (1336-21-6): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Ammonium Hydroxide (1336-21-6): LISTED

Canada NPRI (Supplier Notification Required): Listed Substance

Not listed

Export Control List (CEPA, 1999, Schedule 3)

Not listed

Non-Regulatory Instruments

Not listed

Part Number: 9168

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n F: Sodium Hydroxide 3%, Aqueous
- Part Number:** 9168
- CAS-No.:** Not applicable
- SDS Number:** 4340
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
1020 PRAIRIE VIEW CT
WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** www.newcomersupply.com
- Email:** info@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)

Corrosive to metals, Category 1

Skin corrosion, Category 1B

Serious eye damage, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- May be corrosive to metals
- Causes severe skin burns and eye damage

Precautionary Statement(s):

Prevention:

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash skin thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- Absorb spillage to prevent material damage.
- 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 [or shower].
- Wash contaminated clothing before reuse.
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

- Store locked up.
- Store in a corrosive resistant container/container with a resistant inner liner.

Disposal:

Part Number: 9168

· 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**

| Component | | Concentration |
|-----------|------------------|---------------|
| Name | Sodium Hydroxide | |
| CAS-No. | 1310-73-2 | 3% |

4. FIRST-AID MEASURES
4.1 Description of necessary measures
Inhalation (breathing)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 [or shower]. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse continuously 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: Rinse mouth. Do NOT induce vomiting. 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: | 1 | Fire hazard: | 0 | Reactivity hazard: | 0 |
|----------------|---|--------------|---|--------------------|---|

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Part Number: 9168

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 |
|------------------|-----------|------------|-------|---------------------|
| Sodium Hydroxide | 1310-73-2 | OSHA PEL | TWA | 2 mg/m ³ |
| | | ACGIH TLV | C | 2 mg/m ³ |
| | | NIOSH REL | C | 2 mg/m ³ |
| | | CANADA/ON | PEAK | 2 mg/m ³ |
| | | CANADA/QC | PEAK | 2 mg/m ³ |
| | | CANADA/AB | PEAK | 2 mg/m ³ |
| | | CANADA/BC | PEAK | 2 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

Part Number: 9168

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).

Where the potential exists for exposure over 2 mg/m³: use a NIOSH approved negative pressure, air-purifying, particulate filter respirator with an N, R or P100 filter. More protection is provided by a full facepiece respirator than by a half-mask respirator, and even greater protection is provided by a powered-air purifying respirator.

Leave the area immediately if (1) while wearing a filter or cartridge respirator you can smell, taste, or otherwise detect sodium hydroxide, (2) while wearing particulate filters abnormal resistance to breathing is experienced, or (3) eye irritation occurs while wearing a full facepiece respirator.

Exposure to 10 mg/m³ is immediately dangerous to life and health. If the possibility of exposure above 10 mg/m³ 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, colorless liquid |
| Odor | Odorless |
| 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) | No data available |
| 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

Part Number: 9168

No data available

10.5 Incompatible materials

Sodium hydroxide reacts with strong acids (such as hydrochloric, sulfuric and nitric); water; and moisture to rapidly release heat. Sodium hydroxide reacts with metals (such as aluminum, lead, tin and zinc) to form flammable and explosive hydrogen gas. Sodium hydroxide can form shock sensitive salts on contact with nitrogen containing compounds (such as nitromethane). Sodium hydroxide is not compatible with oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); chlorinated solvents; ammonia; and organic materials. Sodium hydroxide can attack iron, copper, plastics, rubber and coatings.

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

Sodium Hydroxide: Contact can severely irritate and burn the skin.

Serious eye damage/irritation

Sodium Hydroxide: Contact can severely irritate and burn the eyes with possible permanent eye damage (corneal opacities), causing blindness.

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

Sodium hydroxide:

LD50 mouse intraperitoneal 40 mg/kg

Carcinogenicity

IARC: None of the components are listed

NTP: None of the components are listed

OSHA: None of the components are listed

Part Number: 9168

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 UN1824
Proper shipping name Sodium Hydroxide
- 
- Hazard class** 8
 - Packing group** III
 - Environmental hazards** No data available

15. REGULATORY INFORMATION

- 15.1 Canadian Regulations**
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.
Canada DSL Inventory: Registration Status
Sodium Hydroxide (1310-73-2): LISTED
Canada Environmental Emergency Regulations Schedule 1: Listed Substance
Not listed
Canada NPRI (Supplier Notification Required): Listed Substance
Not listed
Export Control List (CEPA, 1999, Schedule 3)

Part Number: 9168

Not listed

Non-Regulatory Instruments

Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Reticulum, Gordon & Sweets Stain Kit, Sol'n G: Formalin 10%, Aqueous
Part Number: 9168
CAS-No.: Not applicable
SDS Number: 2920

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: NEWCOMER SUPPLY
 1020 PRAIRIE VIEW CT
 WAUNAKEE WI 53597-8512

Telephone: 1-800-383-7799

Fax: 1-608-831-0866

Website: www.newcomersupply.com

Email: info@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

Acute toxicity (inhalation), Category 4

Skin irritation, Category 2

Serious eye damage, Category 1

Skin sensitisation, Category 1

Germ cell mutagenicity, Category 2

Carcinogenicity, Category 1A

Specific Target Organ Toxicity – Single exposure, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

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

Precautionary Statement(s):

Prevention:

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN: Gently wash with soap and water.

Part Number: 9168

- Take off contaminated clothing and wash before reuse.
- Contaminated work clothing should not be allowed out of the workplace.
- If skin irritation or a rash occurs: Get medical advice/attention.
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- Specific treatment: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

Storage:

- Store locked up.

Disposal:

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture
Hazardous Components

| Component | | Concentration |
|-----------|----------------|---------------|
| Name | Formaldehyde | |
| CAS-No. | 50-00-0 | 3-4% |
| Name | Methyl Alcohol | |
| CAS-No. | 67-56-1 | <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 soap and water. Take off contaminated clothing and wash before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

IF IN EYES: Rinse continuously 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.

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

Part Number: 9168

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: 3 | hazard: 2 | 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). Ensure proper ventilation. Contain spill. Prevent further leakage if possible and safe to do so. 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 |
|--------------|---------|-----------------|-------|---|
| Formaldehyde | 50-00-0 | OSHA PEL | TWA | 0.75 ppm |
| | | OSHA PEL | STEL | 2 ppm |
| | | ACGIH TLV | C | 0.3 ppm (0.37 mg/m ³) |
| | | NIOSH REL | TWA | 0.016 ppm |
| | | NIOSH REL | C | 0.1 ppm 15-minute |
| | | | | 2 ppm 15 minutes (3 mg/m ³ 15 minutes) |
| | | CANADA/QC | STEV | |
| | | CANADA/ON TWAEV | STEL | 1 ppm 15 minutes |
| | | CANADA/ON TWAEV | C | 1 ppm |
| | | CANADA/BC | TWA | 0.3 ppm 8 hours |
| | | CANADA/BC | C | 1 ppm |
| | | CANADA/AB | OEL | 0.75 ppm 8 hours |
| | | CANADA/AB | C | 1 ppm |
| Component | CAS-No. | Regulatory | Value | Parameters |

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| | | | | |
|----------------|---------|-------------------|------|---|
| Methyl Alcohol | 67-56-1 | OSHA PEL | TWA | 200 ppm (260 mg/m ³) |
| | | ACGIH TLV | TWA | 200 ppm (262 mg/m ³) |
| | | ACGIH TLV | STEL | 50 ppm (328 mg/m ³) |
| | | NIOSH REL | TWA | 200 ppm (260 mg/m ³) |
| | | NIOSH REL | STEL | 250 ppm (325 mg/m ³) |
| | | CANADA NTNL - OEL | TWA | 200 ppm (262 mg/m ³) 8 min |
| | | CANADA NTNL - OEL | STEL | 250 ppm (328 mg/m ³) 15 min |

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).

Where the potential exists for exposure over 0.016 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 20 ppm is immediately dangerous to life and health. If the possibility of exposure above 20 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 unknown concentrations, or escape, wear a self-contained positive-pressure breathing apparatus.

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Physical state | Clear, colorless liquid |
| Odor | Pungent, irritating odor |
| Odor threshold | No data available |
| pH | 6.9-7.1 |
| Melting point/freezing point | No data available |
| Initial boiling point and boiling range | No data available |

Part Number: 9168

| | |
|--|-------------------|
| 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

Heat, sparks, open flame, and ignition sources.

10.5 Incompatible materials

Formaldehyde reacts violently with nitrogen oxides; oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); mixtures of perchloric acid and aniline; nitromethane; magnesium carbonate; and hydrogen peroxide. Formaldehyde reacts with phenol and hydrogen chloride to form toxic bis(chloromethyl) ether. Formaldehyde is not compatible with strong acids (such as hydrochloric, sulfuric and nitric); strong bases (such as sodium hydroxide and potassium hydroxide); iodine; iron; silver; isocyanates; amines; anhydrides; and liquid oxygen.

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation exposure

Formaldehyde: Difficulty in breathing was experienced at 10 to 20 ppm. Upper airway irritation and increased nasal airway resistance were reported at 0.1 to 25 ppm and lower airway and chronic pulmonary obstruction at 5 to 30 ppm. Inhaling formaldehyde can irritate the lungs. Higher exposures may cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency.

Oral exposure

Acute oral exposure to formaldehyde can result in serious systemic symptoms or death.

Dermal exposure

No data available

Skin corrosion/irritation

Formaldehyde is corrosive and contact can severely irritate and burn the skin.

Part Number: 9168

Serious eye damage/irritation

Formaldehyde: 10 to 20 ppm produces almost immediate eye irritation. Most subjects experience irritation of the eyes, nose, and throat at 1 to 3 ppm; many subjects cannot tolerate prolonged exposures to 4 to 5 ppm.

Respiratory or skin sensitization

It has been estimated that exposure for 5 to 10 minutes to 50 to 100 ppm might cause serious injury to the lower respiratory passages. Formaldehyde may cause a skin allergy and an asthma-like allergy. Formaldehyde may cause an asthma-like allergy. Future exposure can cause asthma attacks with shortness of breath, wheezing, coughing, and/or chest tightness.

Germ Cell mutagenicity

No data available

Reproductive toxicity

There is limited evidence that formaldehyde may damage the developing fetus and affect female

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

Formaldehyde:

LD50 rat oral 100 mg/kg

LD50 rat dermal 270 mg/kg

LC50 rat inhalation 0.48 mg/l/4 hours

Carcinogenicity

IARC: Formaldehyde: Group 1, carcinogenic to humans

NTP: Formaldehyde: Known human carcinogen

OSHA: Formaldehyde: Specifically regulated carcinogen

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

Part Number: 9168

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

UN3334

Proper shipping name

Aviation regulated liquid, n.o.s. (Formaldehyde solution, <25%)


Hazard class

9

Packing group

Not applicable

Environmental hazards

No data available

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Formaldehyde (50-00-0): LISTED

Methyl Alcohol (67-56-1): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Not listed

Canada NPRI (Supplier Notification Required): Listed Substance

Formaldehyde (50-00-0): LISTED

Methyl Alcohol (67-56-1): LISTED

Export Control List (CEPA, 1999, Schedule 3)

Not listed

Non-Regulatory Instruments

Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n H: Gold Chloride 0.2%, Aqueous
Part Number: 9168
CAS-No.: Not applicable
SDS Number: 3080
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
 1020 PRAIRIE VIEW CT
 WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
Fax: 1-608-831-0866
Website: www.newcomersupply.com
Email: info@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)
 None
- 2.2 GHS Label elements**
Signal Word NONE
- Pictogram**
- Hazard Statement(s):**
 · None
- Precautionary Statement(s):**
 · None
- 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

| Component | | Concentration |
|-----------|---------------|---------------|
| Name | Gold Chloride | |
| CAS-No. | 13453-07-1 | 0.2% |

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. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Get medical advice/attention if you feel unwell.

Eye Contact

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

Part Number: 9168

Ingestion (swallowed)

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel

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: 0 | 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.

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

Does not contain components with occupational exposure limits.

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

Part Number: 9168

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 | Translucent, light yellow solution; 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 | Evap. rate of water = 1; 1 |
| Flammability (solid, gas) | No data available |
| Upper flammability or explosive limits | No data available |
| Lower flammability or explosive limits | No data available |
| Vapor pressure | 18 mm Hg at 20°C |
| Vapor density | For water in air = 1; 1 |
| 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 | 1.222 (mPa)(s) at 20°C |

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

No data available

10.5 Incompatible materials

Strong reducing agents

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

Part Number: 9168

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

No data available

Aspiration hazard

No data available

Acute toxicity

No data available

Carcinogenicity

IARC: None of the components are listed

IARC: None of the components are listed

IARC: 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: 9168

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 | Not regulated |
| Proper shipping name | Not regulated |
| Hazard class | Not regulated |
| Packing group | Not regulated |
| Environmental hazards | Not regulated |

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Gold Chloride (AuCl₃) (13453-07-1): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Not listed

Canada NPRI (Supplier Notification Required): Listed Substance

Not listed

Export Control List (CEPA, 1999, Schedule 3)

Not listed

Non-Regulatory Instruments

Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

16. OTHER INFORMATION

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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Part Number: 9168

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Reticulum, Gordon & Sweets Stain Kit, Sol'n I: Sodium Thiosulfate 5%, Aqueous
- Part Number:** 9168
- CAS-No.:** Not applicable
- SDS Number:** 4410
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** NEWCOMER SUPPLY
1020 PRAIRIE VIEW CT
WAUNAKEE WI 53597-8512
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** www.newcomersupply.com
- Email:** info@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)
None
- 2.2 GHS Label elements**
- Signal Word** NONE
- Pictogram**
- Hazard Statement(s):**
· None
- Precautionary Statement(s):**
· None
- 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 | Sodium Thiosulfate | |
| CAS-No. | 10102-17-7 | 5% |

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. Get medical advice/attention if you feel unwell.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eye Contact

Part Number: 9168

IF IN EYES: Rinse continuously 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: Rinse mouth. Do NOT induce vomiting. 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: 0 | 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 dust. Avoid skin contact. Avoid eye contact. Wash hands after use.

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

None of the components require monitoring at the workplace.

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.

Part Number: 9168

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 | Translucent, colorless liquid |
| 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 | Evap. rate of water = 1; 1 |
| Flammability (solid, gas) | Not flammable |
| Upper flammability or explosive limits | No data available |
| Lower flammability or explosive limits | No data available |
| Vapor pressure | 18 mm Hg at 20°C |
| Vapor density | No data available |
| Relative density | For water in air = 1; 1 |
| Solubility(ies) | Soluble |
| Partition coefficient: n-octanol/water | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | 1.222 (mPa)(s) at 20°C |

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

No data available

10.5 Incompatible materials

Strong acids, metal nitrates, iodine, lead, and mercury.

10.6 Hazardous decomposition products

Part Number: 9168

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

No data available

Aspiration hazard

No data available

Acute toxicity

No data available

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

Part Number: 9168

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 | Not regulated |
| Proper shipping name | Not regulated |
| Hazard class | Not regulated |
| Packing group | Not regulated |
| Environmental hazards | Not regulated |

15. REGULATORY INFORMATION
15.1 Canadian Regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canada DSL Inventory: Registration Status

Sodium Thiosulfate - Thiosulfuric acid (H₂S₂O₃), disodium salt, pentahydrate (10102-17-7): LISTED

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Not listed

Canada NPRI (Supplier Notification Required): Listed Substance

Not listed

Export Control List (CEPA, 1999, Schedule 3)

Not listed

Non-Regulatory Instruments

Not listed

Schedule 8 of the New Substances Notification Regulations (Chemicals and Polymers)

Not listed

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: | Reticulum, Gordon & Sweets Stain Kit, Sol'n J: Nuclear Fast Red Stain, Kernechtrot |
| Part Number: | 9168 |
| CAS-No.: | Not applicable |
| SDS Number: | 3630 |
| 1.2 Recommended Use: | Laboratory Chemicals |
| 1.3 Company: | NEWCOMER SUPPLY 1020 PRAIRIE VIEW CT WAUNAKEE WI 53597-8512 |
| Telephone: | 1-800-383-7799 |
| Fax: | 1-608-831-0866 |
| Website: | www.newcomersupply.com |
| Email: | info@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
 Specific Target Organ Toxicity – Single exposure, Category 3

2.2 GHS Label elements

Signal Word WARNING

Pictogram



Hazard Statement(s):

- Harmful if swallowed
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation
- May cause drowsiness or dizziness

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.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.

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.
- Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

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

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

| Component | | Concentration |
|-----------|------------------|---------------|
| Name | Nuclear Fast Red | |
| CAS-No. | 6409-77-4 | <1% |
| Name | Aluminum Sulfate | |
| CAS-No. | 17927-65-0 | 4-5% |
| Name | Thymol | |
| CAS-No. | 89-83-8 | 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: Wash with 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

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 |
|------------------|-----------|------------|-------|----------------------|
| Aluminum sulfate | 7784-26-1 | OSHA PEL | STEL | 5 mg/m ³ |
| | | OSHA PEL | TWA | 15 mg/m ³ |
| | | ACGIH TLV | TWA | 1 mg/m ³ |
| | | NIOSH REL | TWA | 2 mg/m ³ |
| | | CANADA/ON | TWA | 1 mg/m ³ |
| | | CANADA/QC | TWA | 2 mg/m ³ |
| | | CANADA/AB | TWA | 2 mg/m ³ |
| | | CANADA/BC | TWA | 1 mg/m ³ |

8.2 Exposure Controls
Appropriate engineering controls

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

8.3 Personal Protective Equipment
Eye/Face protection

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

Part Number: 9168

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). Where the potential exists for exposure over 2 mg/m³: use a NIOSH approved negative pressure, air-purifying, particulate filter respirator with a P95 filter. More protection is provided by a full facepiece respirator than by a half-mask respirator, and even greater protection is provided by a powered-air purifying respirator.

Where the potential exists for exposure over 20 mg/m³: 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.

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 | Opaque, pinkish-red liquid; no precipitate; will separate upon standing |
| 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.

Part Number: 9168

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizers and bases

10.6 Hazardous decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides and ammonia. May emit toxic and irritating fumes when heated.

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 with aluminum sulfate can severely irritate the skin.

Serious eye damage/irritation

Contact with aluminum sulfate 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

Nuclear fast red can cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Acute toxicity

Thymol:

LD50 rat oral 980 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

Part Number: 9168

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 |

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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