

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  
 2505 Parview Road  
 Middleton, WI 53562 USA

**Telephone:** 1-800-383-7799

**Fax:** 1-608-831-0866

**Website:** [www.newcomersupply.com](http://www.newcomersupply.com)

**Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

**2. HAZARD(S) IDENTIFICATION**
**2.1 Classification of the substance or mixture**

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

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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	No data available

**15. REGULATORY INFORMATION**

See component SDS

**16. OTHER INFORMATION**

Preparation Information  
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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  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
- Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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## 2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**  
GHS Classification, (in accordance with 29 CFR1910.1200)  
Acute toxicity (oral), Category 4

**2.2 GHS Label elements**

**Signal Word** WARNING

**Pictogram**



**Hazard Statement(s):**

- Harmful if swallowed

**Precautionary Statement(s):**

**Prevention:**

- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.

**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

**4.1 Description of necessary measures**

**Inhalation (breathing)**

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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/shower. Get medical advice/attention if you feel unwell.

**Eye Contact**

IF IN EYES: Rinse cautiously 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**

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**

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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 <sup>3</sup>
		ACGIH TLV	TWA	0.03 mg/m <sup>3</sup>
		NIOSH REL	TWA	1 mg/m <sup>3</sup>
		NIOSH REL	STEL	3 mg/m <sup>3</sup>

**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
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

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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.

#### Respiratory or skin sensitization

No data available

#### Germ Cell mutagenicity

No data available

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure



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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)**
**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

Part Number: 9168

**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  
 2505 Parview Road  
 Middleton, WI 53562 USA  
  
**Telephone:** 1-800-383-7799  
**Fax:** 1-608-831-0866  
**Website:** [www.newcomersupply.com](http://www.newcomersupply.com)  
**Email:** [newly@newcomersupply.com](mailto:newly@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)  
 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 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.
- 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

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**4.1 Description of necessary measures**
**Inhalation (breathing)**

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

**Skin Contact**

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

**Eye Contact**

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

**Ingestion (swallowed)**

IF SWALLOWED: 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**

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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 <sup>3</sup>
		ACGIH TLV	TWA	1 mg/m <sup>3</sup>
		ACGIH TLV	STEL	2 mg/m <sup>3</sup>
		NIOSH REL	TWA	1 mg/m <sup>3</sup>
		NIOSH REL	STEL	2 mg/m <sup>3</sup>

**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).

Oxalic Acid: Where the potential exists for exposure over 1 mg/m<sup>3</sup>: 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/m<sup>3</sup>: 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/m<sup>3</sup>: is immediately dangerous to life and health. If the possibility of exposure above 500 mg/m<sup>3</sup> 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**

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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

**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**

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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**

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.

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**Contaminated packaging**

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

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

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	No data available

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

Preparation Information

Newcomer Supply Inc.

800-383-7799

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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  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
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## 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.	7783-83-7	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/shower. If skin irritation occurs: Get medical advice/attention.

**Eye Contact**

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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: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention 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: 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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://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  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
- Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

## 2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**  
 GHS Classification, (in accordance with 29 CFR1910.1200)  
 Acute toxicity (oral), Category 4  
 Skin corrosion, Category 1  
 Serious eye damage, Category 1

**2.2 GHS Label elements**

**Signal Word** DANGER

**Pictogram**



**Hazard Statement(s):**

- Harmful if swallowed
- Causes severe skin burns and eye damage

**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/vapours/spray.

**Response:**

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

- Store locked up.

Part Number: 9168

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

**Eye Contact**

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

**Ingestion (swallowed)**

IF SWALLOWED: 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
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**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 <sup>3</sup>
		ACGIH TLV	TWA	0.01 mg/m <sup>3</sup>
		NIOSH REL	TWA	0.01 mg/m <sup>3</sup>

**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

Part Number: 9168

**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

**11. TOXICOLOGICAL INFORMATION**
**11.1 Information on toxicological effects**
**Inhalation exposure**

No data available

**Oral exposure**

Part Number: 9168

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**

No data available

**13. DISPOSAL CONSIDERATIONS****13.1 Waste disposal methods  
Contents**

Part Number: 9168

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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://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
- Part Number:** 9168
- CAS-No.:** Not applicable
- SDS Number:** 2320
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** Newcomer Supply  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
- Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

## 2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**  
GHS Classification, (in accordance with 29 CFR1910.1200)  
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.
- 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.

**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/shower.
- Wash contaminated clothing before reuse.
- 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: 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/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

**Eye Contact**

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

**Ingestion (swallowed)**

IF SWALLOWED: 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	Fire	Reactivity
hazard: 3	hazard: 1	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

**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 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

**10.5 Incompatible materials**



Part Number: 9168

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)**

<b>UN-Number</b>	2672
<b>Proper shipping name</b>	Ammonia solutions
<b>Hazard class</b>	8
<b>Packing group</b>	III
<b>Environmental hazards</b>	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](http://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  
 2505 Parview Road  
 Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799  
**Fax:** 1-608-831-0866  
**Website:** [www.newcomersupply.com](http://www.newcomersupply.com)  
**Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)
- 24 HOUR EMERGENCY CONTACT**  
**CALL CHEMTREC: 1-800-424-9300**  
 Contact CHEMTREC only in the event of an emergency involving a chemical spill, leak, fire, exposure or other accident.

**2. HAZARD(S) IDENTIFICATION**

- 2.1 Classification of the substance or mixture**  
 GHS Classification, (in accordance with 29 CFR1910.1200)  
 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/vapours/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/shower.
- Wash contaminated clothing before reuse.
- 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:**

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

**Eye Contact**

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

**Ingestion (swallowed)**

IF SWALLOWED: 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
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**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 <sup>3</sup>
		ACGIH TLV	C	2 mg/m <sup>3</sup>
		NIOSH REL	C	2 mg/m <sup>3</sup>

**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/m<sup>3</sup>: 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/m<sup>3</sup> is immediately dangerous to life and health. If the possibility of exposure above 10 mg/m<sup>3</sup> 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

**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**

No data available

Part Number: 9168

**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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://www.newcomersupply.com)

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Version: 1.0

Date of Issue:

Revision Date:



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  
2505 Parview Road  
Middleton, WI 53562 USA

**Telephone:** 1-800-383-7799

**Fax:** 1-608-831-0866

**Website:** [www.newcomersupply.com](http://www.newcomersupply.com)

**Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

## 2. HAZARD(S) IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Acute toxicity (oral), Category 4

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/vapours/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 plenty of soap and water.

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- 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 cautiously 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 plenty of 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 cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Ingestion (swallowed)**

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

**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 <sup>3</sup> )
		NIOSH REL	TWA	0.016 ppm
		NIOSH REL	C	0.1 ppm 15-minute

Component	CAS-No.	Regulatory	Value	Parameters
Methyl Alcohol	67-56-1	OSHA PEL	TWA	200 ppm (260 mg/m <sup>3</sup> )
		ACGIH TLV	TWA	200 ppm (262 mg/m <sup>3</sup> )
		ACGIH TLV	STEL	50 ppm (328 mg/m <sup>3</sup> )
		NIOSH REL	TWA	200 ppm (260 mg/m <sup>3</sup> )
		NIOSH REL	STEL	250 ppm (325 mg/m <sup>3</sup> )

**8.2 Exposure Controls**

**Appropriate engineering controls**

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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
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

Part Number: 9168

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.

**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.

Part Number: 9168

**Germ Cell mutagenicity**

No data available

**Reproductive toxicity**

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

**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**
**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

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://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  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
- Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

## 2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**  
GHS Classification, (in accordance with 29 CFR1910.1200)  
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.	27988-77-8	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/shower. Get medical advice/attention if you feel unwell.

**Eye Contact**

Part Number: 9168

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: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention 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: 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	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**

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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://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  
 2505 Parview Road  
 Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799  
**Fax:** 1-608-831-0866  
**Website:** [www.newcomersupply.com](http://www.newcomersupply.com)  
**Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

**2. HAZARD(S) IDENTIFICATION**

- 2.1 Classification of the substance or mixture**  
 GHS Classification, (in accordance with 29 CFR1910.1200)  
 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/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

**Eye Contact**

Part Number: 9168

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: 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**



Part Number: 9168

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises.

**8.3 Personal Protective Equipment**
**Eye/Face protection**

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

**Skin Protection**

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

**Body Protection**

No data available

**Respiratory Protection**

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**

Part Number: 9168

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

**10.6 Hazardous decomposition products**

No data available

**11. TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Inhalation exposure**

No data available

**Oral exposure**

No data available

**Dermal exposure**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/irritation**

No data available

**Respiratory or skin sensitization**

No data available

**Germ Cell mutagenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

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

Part Number: 9168

**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

<b>14.1 DOT (US)</b>	
<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://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 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  
2505 Parview Road  
Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
- Fax:** 1-608-831-0866
- Website:** [www.newcomersupply.com](http://www.newcomersupply.com)
- Email:** [newly@newcomersupply.com](mailto:newly@newcomersupply.com)

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

## 2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**  
 GHS Classification, (in accordance with 29 CFR1910.1200)  
 Acute toxicity (oral), Category 4  
 Skin irritation, Category 2  
 Serious Eye Damage/Eye irritation, Category 2  
 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.

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- 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

Part Number: 9168

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 <sup>3</sup>
		OSHA PEL	TWA	15 mg/m <sup>3</sup>
		ACGIH TLV	TWA	1 mg/m <sup>3</sup>
		NIOSH REL	TWA	2 mg/m <sup>3</sup>

**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**

Part Number: 9168

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/m<sup>3</sup>: 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/m<sup>3</sup>: 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.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**



Part Number: 9168

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**
**12.1 Ecotoxicity**

No data available

Part Number: 9168

**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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	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](http://www.newcomersupply.com)

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