SAFETY DATA SHEET

Section 1. Product and Company Identification

Manufacturer:
Poly Scientific R&D Corp
70 Cleveland Ave
Bay Shore, NY 11706
631-586-0400
www.polyrnd.com
polyrnd@polyrnd.com

Item Number:
s2053-1

Common Name:
Silver Solution Grimelius Method

Intended Use:
In Vitro Diagnostic use. Laboratory Use Only

IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Section 2. Hazard Identification

Harmful If Swallowed or Inhaled

Avoid breathing dust or vapor. May be irritating to eyes, skin, and respiratory system. Wear safety goggles and rubber gloves to avoid contact. Wash thoroughly after handling. Keep container tightly closed.

EFFECTS OF EXPOSURE: Ingestion may cause nausea and abdominal pain. Mild irritant to skin and eyes.

TARGET ORGANS: None.

FIRST AID: Call a physician at once!

For Fire: Use extinguishing media appropriate for surrounding fire.

For Spill: Eliminate ignition sources. Pick up with absorbent material and containerize for proper disposal.

Hazards not otherwise covered by GHS: None

Section 3. Composition Information

Exposure Limits (A blank value indicates no information available)

Component | CAS# | PEL (mg/m3) | STEL (mg/m3) | CEIL (mg/m3) | Concentration Range
--- | --- | --- | --- | --- | ---
No OSHA hazardous | 0-5% | N/A | N/A | N/A | N/A
Components | 50-100 % | N/A | N/A | N/A | N/A

Section 4. First Aid Measures

Eye Contact: Check for and remove contact lenses. Wash with large amounts of water for 15 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing and shoes. Wash the affected area with large with soap and water. Seek medical attention

Ingestion: Give two glasses of water to a conscious victim. Do not induce vomiting. Seek medical attention

Inhalation: Move person to fresh air. If necessary give CPR; warning this could pose a risk of exposure to the rescue breather. Seek medical attention

The most important known symptoms and effects are described in section 2 and/or section 11.

Section 5. Fire Fighting Measures

Extinguishing Media: N/A

Special Fire and Explosion Remarks: NA

Section 6. Accidental Release Measures

Spill Cleanup and Disposal Special: N/A

Spill Cleanup: Take up spills with absorbent material and containerize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

Section 7. Handling and Storage

Storage and Handling Special: N/A

Storage and handling: Keep container tightly closed. Store in a cool, dry area and protect from physical damage

Section 8. Exposure Controls/Personal Protection

Personal Protective Equipment: N/A

This information is provided as a guide but proper PPE can only be determined by the end user and their situation.

Engineering Controls: Provide local exhaust ventilation to keep the airborne concentrations of vapors below their respective threshold limit values. Ensure that eyewash stations and safety showers are local to the work-station.

Section 9. Physical and Chemical Properties

Appearance: clear colorless

Odor: N/A

Odor Threshold: N/A

pH: N/A

Melting Point: N/A

Boiling Point: N/A

Flash Point (F) TCC: NA

Evaporation Rate: N/A

Upper Flammability Limit (%): NA

Lower Flammability Limit (%): NA

Specific Gravity (@20C): N/A

Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Relative Density: N/A

Water Soluble?: Yes

Volatile Percent: N/A

Partition Coefficient: n-octanol/water: N/A

Auto Ignition Temp.: N/A

Decomposition Temp: N/A

Viscosity: N/A
SAFETY DATA SHEET

Section 10. Stability and reactivity

Special Remarks on Stability: N/A

Special Remarks on Reactivity: N/A

Water Reactive: No

Section 11. Toxicological Information

Routes of Entry: N/A

Animal Toxicity: N/A

Human Toxic Effects: N/A

Potential Acute Health Effects: N/A

Potential Chronic Health Effects: N/A

Section 12. Ecological Information

Ecological Information: N/A

Section 13. Disposal Considerations

Waste Disposal: Dispose of in accordance with local, state and federal laws.

Section 14. Transport Information

DOT Identification: Non Hazardous

Section 15. Regulatory Information

State Regulations: New York release reporting list: N/A

SARA Section 311 Reporting

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactive</th>
<th>SARA302</th>
<th>SARA313</th>
<th>CERCLA</th>
<th>RCRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No OSHA hazardous</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Components

| No | No | No | No | No | No | No | No | No | No |

Section 16. Other Information

Review Date: 12/4/2015

Reviewed by: ddi

MSDS Group Id: 2

Notice: This MSDS applies only to the material as packaged. If the material is altered by any means it may pose risks not mentioned here. It is the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on reliable technical data, Poly Scientific R&D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.
### SDS for Fast Green FCF

#### Section 1. Product and Company Identification
- **Item Number:** s231‐1
- **Common Name:** Fast Green FCF
- **CAS Number:** 12433‐72‐0
- **Chemical Abstracts Service Registry Number (CAS):** 12433‐72‐0
- **Company:** Poly Scientific R&D Corp

#### Section 2. Hazard Identification
- **Summary:**
  - **Acute Toxicity:** Oral: Cat 1, Rat: LD₅₀ 11 mg/kg
  - **Inhalation Toxicity:** Dust: Cat 1, Rat: LC₅₀ 57 mg/m³
  - **Skin Corrosiveness:** Cat 1A, 1B, 1C
  - **Eye Corrosiveness:** Cat 1

#### Section 3. Composition Information
- **Component:**
  - **Acetic Acid, Glacial**

#### Section 4. First Aid Measures
- **Ingestion:**
  - Take two glasses of water to a conscious victim. Do not induce vomiting. Seek medical attention.
- **Inhalation:**
  - Move person to fresh air and keep at rest in a position comfortable for breathing. Dispose of contents/container to an approved waste disposal plant.
- **Skin Contact:**
  - Remove contaminated clothing and shoes. Wash the affected area with large amounts of water for 15 minutes. Seek medical attention.
- **Eye Contact:**
  - Check for and remove contact lenses. Wash with large amounts of water for 15 minutes. Seek medical attention.

#### Section 5. Fire Fighting Measures
- **Extinguishing Media:**
  - Use dry sand, dry chemicals, CO₂, Halon 1211, dry powder.

#### Section 6. Accidental Release Measures
- **Spill Cleanup:**
  - Take up spills with absorbent material and containerize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

#### Section 7. Handling and Storage
- **Safe Handling:**
  - Caution! Corrosive! Neutralize alkaline material (soda ash)
  - Take up spills with absorbent material and containerize for proper disposal.

#### Section 8. Exposure Controls/Personal Protection
- **Engineered Controls:**
  - This information is provided as a guide but proper PPE can only be determined by the end user and their situation.
- **Personal Protective Equipment:**
  - Safety glasses, gloves, vapor respirator.

#### Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Density</td>
<td>0.95</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C₆H₅NO₂</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>114.11 g/mol</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear green</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight vinegar</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>1.05 mg/m³</td>
</tr>
<tr>
<td>Odor Threshold (air)</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative Water Solubility (%)</td>
<td>64</td>
</tr>
<tr>
<td>Relative n-Octanol/Water Solubility (%)</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Density (at 20°C)</td>
<td>1.05 g/cm³</td>
</tr>
<tr>
<td>Melting Point</td>
<td>2353 (9°C)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>110°C</td>
</tr>
<tr>
<td>Flash Point (TCC)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Section 10. Stability and Reactions
- **Stability:**
  - Stable in the dark.
- **Conditions to Avoid:**
  - Strong oxidizing agents.

#### Section 11. Toxicological Information
- **Inhalation:**
  - Causes severe skin burns and eye damage. Suspected of causing genetic defects.

#### Section 12. Ecological Information
- **Hazards not otherwise covered by GHS:** None

#### Section 13. Disposal Considerations
- In case of fire: Use dry sand, dry chemicals, CO₂, Halon 1211, dry powder.

#### Section 14. Transport Information
- **UN Number:** 2902
- **Class:** 8
- **Special Transport Specifications:** N/A

#### Section 15. Regulatory Information
- **Exposure Limits:**
  - (A blank value indicates no information available)
  - **Flash Point (F) TCC:** N/A
  - **Boiling Point:** 110°C
  - **Melting Point:** 2353 (9°C)
  - **pH:** N/A
  - **Odor Threshold (air):** 1.05 mg/m³
  - **Odor Threshold (air):** N/A
  - **Appearance:** Clear green
  - **Odor:** Slight vinegar
  - **Odor Threshold (air):** 1.05 mg/m³
  - **Odor Threshold (air):** N/A
  - **Relative Water Solubility:** 64%
  - **Relative n-Octanol/Water Solubility:** N/A

#### Section 16. Other Information
- **SAFETY DATA SHEET**
- **Manufacturer:** Poly Scientific R&D Corp
- **Address:** 70 Cleveland Ave, Bay Shore, NY 11706
- **Website:** www.polyrnd.com
- **Email:** polyrnd@polyrnd.com
- **Phone:** 631‐586‐0400
- **Intended Use:** In Vitro Diagnostic use. Laboratory Use Only
SAFETY DATA SHEET

Section 10. Stability and reactivity
Special Remarks on Stability: Stable
Special Remarks on Reactivity: N/A

Water Reactive: No

Section 11. Toxicological Information
Routes of Entry: Inhalation, Skin Absorption, Ingestion

Animal Toxicity: Glacial Acetic Acid: Acute Oral (LD50): 3310 mg/kg (Rat); Acute Dermal (LD50): 1060 mg/kg (Rabbit); Fast Green FCF: Acute Oral (LD50): .2gm/kg (Rat)

Human Toxic Effects: Target Organs: Lungs, mucous membranes, upper respiratory tract, skin, eyes, teeth
Potential Acute Health Effects: Hazardous in case of inhalation, eye contact, skin contact, ingestion
Potential Chronic Health Effects: Fast Green: IARC Code 3

Section 12. Ecological Information
Ecological Information: N/A

Section 13. Disposal Considerations
Waste Disposal: Dispose of in accordance with local, state and federal laws.

Section 14. Transport Information
DOT Identification: Non Hazardous

Section 15. Regulatory Information
State Regulations: New York release reporting list: Acetic Acid

Sara Section 311 Reporting
Component | CAS# | Acute | Chronic | Fire | Pressure | Reactive | SARA302 | SARA313 | CERCLA | RCRA
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Acetic Acid, Glacial | 64-19-7 | No | No | No | No | No | No | No | Yes | No
Fast Green FCF | 2353-45-9 | No | No | No | No | No | No | No | No | No

Section 16. Other Information
Review Date: 12/1/2015
Reviewed by: ddi

MSDS Group Id: 79

Notice: This MSDS applies only to the material as packaged. If the material is altered by any means it may pose risks not mentioned here. It is the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use.

While this MSDS is based on reliable technical data, Poly Scientific R&D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.
Sodium Thiosulfate 5% Aqueous

**Section 1. Product and Company Identification**

**Manufacturer:** Poly Scientific R&D Corp
70 Cleveland Ave
Bay Shore, NY 11706
631‐586‐0400
www.polyrnd.com
polyrnd@polyrnd.com

**Item Number:** s1895‐1

**Common Name:** Sodium Thiosulfate 5% Aqueous

**Intended Use:** In Vitro Diagnostic use. Laboratory Use Only

**IN CASE OF EMERGENCY, CONTACT:** CHEMTREC (24HR) 800‐424‐9300

**Section 2. Hazard Identification**

**Harmful If Swallowed or Inhaled**

Avoid breathing dust or vapor. May be irritating to eyes, skin, and respiratory system. Wear safety goggles and rubber gloves to avoid contact. Wash thoroughly after handling. Keep container tightly closed.

**EFFECTS OF EXPOSURE:** Ingestion may cause nausea and abdominal pain. Mild irritant to skin and eyes. 

**TARGET ORGANS:** None.

**FIRST AID:** Call a physician at once!

**For Fire:** Use extinguishing media appropriate for surrounding fire.

**For Spill:** Eliminate ignition sources. Pick up with absorbent material and containerize for proper disposal.

**Hazards not otherwise covered by GHS:** None

**Section 3. Composition Information**

**Exposure Limits (A blank value indicates no information available)**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>PEL(mg/m3)</th>
<th>STEL(mg/m3)</th>
<th>CEIL(mg/m3)</th>
<th>Concentration Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate</td>
<td>10102‐17‐7</td>
<td>0‐5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section 4. First Aid Measures**

**Eye Contact:** Check for and remove contact lenses. Wash with large amounts of water for 15 minutes. Seek medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Wash the affected area with soap and water. Seek medical attention.

**Ingestion:** Give two glasses of water to a conscious victim. Do not induce vomiting. Seek medical attention.

**Inhalation:** Move person to fresh air. If necessary give CPR; warning this could pose a risk of exposure to the rescue breather. Seek medical attention.

The most important known symptoms and effects are described in section 2 and/or section 11.

**Section 5. Fire Fighting Measures**

**Extinguishing Media:** Dry Chemical, Carbon Dioxide, Water Spray, Alcoholic Foam

**Special Fire and Explosion Remarks:** N/A

**Section 6. Accidental Release Measures**

**Spill Cleanup and Disposal Special:** Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

**Spill Cleanup:** Take up spills with absorbent material and containerize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

**Section 7. Handling and Storage**

**Storage and Handling Special:** N/A

**Storage and handling:** Keep container tightly closed. Store in a cool, dry area and protect from physical damage.

**Section 8. Exposure Controls/Personal Protection**

**Personal Protective Equipment:** Safety glasses, chemical resistant apron, gloves, respirator

This information is provided as a guide but proper PPE can only be determined by the end user and their situation.

**Engineering Controls:** Provide local exhaust ventilation to keep the airborne concentrations of vapors below their respective threshold limit values. Ensure that eyewash stations and safety showers are local to the work‐station.

**Section 9. Physical and Chemical Properties**

**Appearance:** clear, colorless

**Odor:** Odorless

**Odor Threshold:** N/A

**pH:** N/A

**Melting Point:** N/A

**Boiling Point:** N/A

**Flash Point (F) TCC:** N/A

**Evaporation Rate:** N/A

**Upper Flammability Limit (%):** N/A

**Lower Flammability Limit (%):** N/A

**Specific Gravity (@20°C):** N/A

**Vapor Pressure (mm Hg):** N/A

**Vapor Density (Air=1):** N/A

**Relative Density:** n‐octanol/water: N/A

**Auto Ignition Temp.:** N/A

**Decomposition Temp.:** N/A

**Viscosity:** N/A

**Water Soluable?** Yes

**Volatile Percent:** N/A

**Partition Coefficient:** n‐octanol/water: N/A

**Auto Ignition Temp.:** N/A

**Decomposition Temp.:** N/A

**Viscosity:** N/A
Section 10. Stability and reactivity

Special Remarks on Stability: Stable

Special Remarks on Reactivity: N/A

Section 11. Toxicological Information

Routes of Entry: Inhalation, Ingestion

Animal Toxicity: N/A

Human Toxic Effects: Target Organs: Skin, Eyes, Respiratory System
Potential Acute Health Effects: N/A
Potential Chronic Health Effects: N/A

Section 12. Ecological Information

Ecological Information: N/A

Section 13. Disposal Considerations

Waste Disposal: Dispose of in accordance with local, state and federal laws.

Section 14. Transport Information

DOT Identification: Non-Hazardous

Section 15. Regulatory Information

State Regulations: New York release reporting list: N/A

Sara Section 311 Reporting

Component | CAS# | Acute | Chronic | Fire | Pressure | Reactive | SARA302 | SARA313 | CERCLA | RCRA
---------- | ---- | ----- | ------- | ---- | -------- | -------- | ------- | ------- | ------- | -------
Sodium Thiosulfate | 10102-17-7 | No | No | No | No | No | No | No | No

Section 16. Other Information

Review Date: 12/2/2015
Reviewed by: ddi

MSDS Group Id: 112

Notice: This MSDS applies only to the material as packaged. If the material is altered by any means it may pose risks not mentioned here. It is the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use.

While this MSDS is based on reliable technical data, Poly Scientific R&D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.