

## Section 1. Product and Company Identification

Item Number: S181S-1  
 Common Name: Silver Nitrate Solution (Fontana)  
 Intended Use: In Vitro Diagnostic use. Laboratory Use Only  
 IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Manufacturer: Poly Scientific R&D Corp

70 Cleveland Ave  
 Bay Shore, NY 11706  
 631-586-0400  
 polyrnd@polyrnd.com  
 www.polyrnd.com

## Section 2. Hazard Identification

272 Oxidising liquids; Oxidising solids Cat 2  
 302 Acute toxicity, oral Cat 4  
 314 Skin corrosion/irritation Cat 1A, B, C



Danger  
 May intensify fire; oxidiser.  
 Harmful if swallowed.  
 Causes severe skin burns and eye damage.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Keep/Store away from clothing/ combustible materials.  
 Take any precaution to avoid mixing with combustibles. Do not breathe dust/fume/gas/mist/vapours/spray.  
 Wash hands/skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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. 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.  
 Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. Store locked up.  
 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise covered by GHS: None

## Section 3. Composition Information

Exposure Limits(A blank value indicates no information available)

Component	CAS#	PEL(mg/m <sup>3</sup> )	STEL(mg/m <sup>3</sup> )	CEIL(mg/m <sup>3</sup> )	Concentration Range
Silver Nitrate	7761-88-8		0.01		5-10%
Ammonium Hydroxide	1336-21-6	35.00	50.00		5-10%

## 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: Dry Chemical Powder, Alcohol Foam, Water Spray or Carbon Dioxide  
 Special Fire and Explosion Remarks: N/A

## Section 6. Accidental Release Measures

Spill Cleanup and Disposal Special: Pick up spill with absorbent vermiculite  
 Spill Cleanup: Take up spills with absorbant material and containerize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

## Section 7. Handling and Storage

Storage and Handling Special: Refrigerate  
 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: Splash Goggles, Gloves, Synthetic Apron, Vapor 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	Evaporation Rate.....: N/A	Water Soluable?.....: Yes
Odor.....: N/A	Upper Flammability Limit (%): N/A	Volatile Percent.....: N/A
Odor Threshold.....: N/A	Lower Flammability Limit (%): N/A	Partition Coefficient.....: n-octanol/water: N/A
pH.....: N/A	Specific Gravity (@ 20C).....: N/A	Auto Ignition Temp.....: N/A
Melting Point.....: N/A	Vapor Pressure (mm Hg).....: N/A	Decomposition Temp.....: N/A
Boiling Point.....: N/A	Vapor Density (Air=1).....: N/A	Viscosity.....: N/A
Flash Point (F) TCC.....: N/A	Relative Density.....: N/A	

## 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: Silver Nitrate: Acute Oral (LD50) 50 mg/kg (Mouse) Intraperitoneal(LD50) 34500 ug/kg (Mouse); Ammonium Hydroxide Acute Oral (LD50) 350 mg/kg (Mouse) I.V. (LDLO) 10 mg/kg (Rabbit); Potassium Hydroxide: Acute Oral (LD50)

Human Toxic Effects: Target Organs: Blood, eyes, skin, mucous membranes

Potential Acute Health Effects: Hazardous in case of eye,skin contact, inhalation,ingestion

Potential Chronic Health Effects: Mutagenic. Repeated exposure can produce target organ damage.

## 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: UN1760; Corrosive liquid, n.o.s. (Silver Nitrate); 8, III

## Section 15. Regulatory Information

State Regulations: New York release reporting list: Silver Nitrate, Ammonium Hydroxide

## Sara Section 311 Reporting

Component	CAS#	Acute	Chronic	Fire	Pressure	Reactive	SARA302	SARA313	CERCLA	RCRA
Silver Nitrate	7761-88-8	No	No	No	No	No	No	Yes	Yes	No
Ammonium Hydroxide	1336-21-6	No	No	No	No	No	No	No	Yes	No

## Section 16. Other Information

Review Date: 12/17/2015

Reviewed by: ddi

MSDS Group Id: 12

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&amp;D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.

## Section 1. Product and Company Identification

Item Number: s202-1  
 Common Name: Gold Chloride 0.2% Aqueous  
 Intended Use: In Vitro Diagnostic use. Laboratory Use Only  
 IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Manufacturer: Poly Scientific R&D Corp

70 Cleveland Ave  
 Bay Shore, NY 11706  
 631-586-0400  
 polyrnd@polyrnd.com  
 www.polyrnd.com

## 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
Gold Chloride	16961-25-4				0-5%

## 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: Water Spray, Dry Chemical, Alcoholic Foam, Carbon Dioxide,

Special Fire and Explosion Remarks: N/A

## Section 6. Accidental Release Measures

Spill Cleanup and Disposal Special: Pick up with absorbent material.

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

## Section 7. Handling and Storage

Storage and Handling Special: Refrigerate

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, Gloves, Vapor 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 .....	Evaporation Rate.....	Water Soluable? .....
Odor.....	Upper Flammability Limit (%):	Volatile Percent.....
Odor Threshold.....	Lower Flammability Limit (%):	Partition Coefficient.....
pH.....	Specific Gravity (@ 20C).....	Auto Ignition Temp.....
Melting Point.....	Vapor Pressure (mm Hg).....	Decomposition Temp.....
Boiling Point.....	Vapor Density (Air=1) .....	Viscosity .....
Flash Point (F) TCC.....	Relative Density.....	

**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, Ingestion, Skin Absorption

Animal Toxicity: Intravenous (LDLo) 75 mg/kg (Mouse); Subcutaneous (TDLo) 75 22106 ug/kg (Mouse); Intratesticular TDLo) 5527 ug/kg (Rat)

Human Toxic Effects: Target Organs: None

Potential Acute Health Effects: Hazardous in case of inhalation, eye contact, skin contact, ingestion

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	SARA 302	SARA 313	CERCLA	RCRA
Gold Chloride	16961-25-4	No	No	No	No	No	No	No	No	No

**Section 16. Other Information**

Review Date: 12/17/2015

Reviewed by: ddi

MSDS Group Id: 65

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.

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## Section 1. Product and Company Identification

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

Manufacturer: Poly Scientific R&D Corp

70 Cleveland Ave  
 Bay Shore, NY 11706  
 631-586-0400  
 polyrnd@polyrnd.com  
 www.polyrnd.com

## 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
Sodium Thiosulfate	10102-17-7				0-5%

## 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 neccessary 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 conaminated surface thoroughly.

Spill Cleanup: Take up spills with absorbant 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	Evaporation Rate.....	N/A	Water Soluable? .....	Yes
Odor.....	Odorless	Upper Flammability Limit (%):	N/A	Volatile Percent.....	N/A
Odor Threshold.....	N/A	Lower Flammability Limit (%):	N/A	Partition Coefficient.....	n-octanol/water: N/A
pH.....	N/A	Specific Gravity (@ 20C).....	N/A	Auto Ignition Temp.....	N/A
Melting Point.....	N/A	Vapor Pressure (mm Hg).....	N/A	Decomposition Temp.....	N/A
Boiling Point.....	N/A	Vapor Density (Air=1).....	N/A	Viscosity .....	N/A
Flash Point (F) TCC.....	N/A	Relative Density.....	N/A		

**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, 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	SARA 302	SARA 313	CERCLA	RCRA
Sodium Thiosulfate	10102-17-7	No	No	No	No	No	No	No	No	No

**Section 16. Other Information**

Review Date: 12/27/2015

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.

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**Section 1. Product and Company Identification**

Item Number: s248-1  
 Common Name: Nuclear Fast Red Kernechtrot 0.1%  
 Intended Use: In Vitro Diagnostic use. Laboratory Use Only  
 IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Manufacturer: Poly Scientific R&D Corp

70 Cleveland Ave  
 Bay Shore, NY 11706  
 631-586-0400  
 polyrnd@polyrnd.com  
 www.polyrnd.com

**Section 2. Hazard Identification**

315 Skin corrosion/irritation Cat 2  
 319 Serious eye damage/eye irritation Cat 2A  
 335 Specific target organ toxicity, single exposure: Respiratory tract irritation Cat 3

**Warning**

Causes skin irritation and serious eye irritation.  
 May cause respiratory irritation.

Wash hands/skin thoroughly after handling. Use only in well-ventilated area. In case of inadequate ventilation wear respiratory ventilation. Wear protective gloves/ eye protection/ face protection/protective clothing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. 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. Call a POISON CENTER or doctor/ physician if you feel unwell. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. Store locked up. Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise covered by GHS: None

**Section 3. Composition Information**

Exposure Limits(A blank value indicates no information available)

Component	CAS#	PEL(mg/m <sup>3</sup> )	STEL(mg/m <sup>3</sup> )	CEIL(mg/m <sup>3</sup> )	Concentration Range
Aluminum Sulfate	7784-31-8		2.00		0-5%

**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 : use Dry Chemical, Carbon Dioxide, Water Spray, Alcohol Foam

Special Fire and Explosion Remarks : N/A

**Section 6. Accidental Release Measures**

Spill Cleanup and Disposal Special : Pick up spill with absorbent vermiculite

Spill Cleanup: Take up spills with absorbant 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, Gloves, Vapor 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 reddish	Evaporation Rate .....	N/A	Water Soluable? .....	Yes
Odor .....	N/A	Upper Flammability Limit (%) ..	N/A	Volatile Percent .....	N/A
Odor Threshold .....	N/A	Lower Flammability Limit (%) ..	N/A	Partition Coefficient .....	n-octanol/water: N/A
pH.....	N/A	Specific Gravity (@ 20C) .....	N/A	Auto Ignition Temp .....	N/A
Melting Point .....	N/A	Vapor Pressure (mm Hg) .....	N/A	Decomposition Temp .....	N/A
Boiling Point .....	N/A	Vapor Density (Air=1) .....	N/A	Viscosity .....	N/A
Flash Point (F) TCC .....	N/A	Relative Density .....	N/A		

**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: Acute Oral (LD50) 6207 mg/kg (Mouse) Intravenous (LD50) 1735 mg/kg (Mouse)

Human Toxic Effects: Target Organs: Central Nervous System

Potential Acute Health Effects : Hazardous in case of inhalation, eye contact, skin contact, ingestion

Potential Chronic Health Effects : Repeated or prolonged exposure to the substance can produce target organs damage

**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: Aluminum Sulfate

## Sara Section 311 Reporting

Component	CAS#	Acute	Chronic	Fire	Pressure	Reactive	SARA 302	SARA 313	CERCLA	RCRA
Aluminum Sulfate	7784-31-8	No	No	No	No	No	No	No	Yes	No

**Section 16. Other Information**

Review Date: 12/17/2015

Reviewed by: ddi

MSDS Group Id: 92

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