





### Section 1. Identification of the Substance/Mixture and the Company

<b>1.1 Product Identifier</b>	Product Name: SpiroPrep Product Number: SSE	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	ScyTek Laboratories, Inc.
	<b>Address</b>	205 South 600 West Logan, Utah 84321 U.S.A.
	<b>Phone Number</b>	800-729-8350
	<b>Fax Number</b>	435-755-0015
	<b>e-mail</b>	msds@scytek.com
	<b>Website</b>	scytek.com

### Section 2. Hazards Identification

<b>2.1 GHS Classification</b>	Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319 Acute aquatic toxicity (Category 2) – H401 Chronic aquatic toxicity (Category 2) – H411	
<b>Classification: Directive 1999/45/EC</b>	 <p><b>Xi R36/38 R50/53; S26 S36/37/39, S60, S61</b></p> EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande	




	 <p><b>N:</b>                  EN: Dangerous for the environment                  DA: Miljøfarlig                  DE: Umweltgefährlich                  EL: Επικίνδυνο για το περιβάλλον                  ES: Peligroso para el medio ambiente                  FR: Dangereux pour l'environnement                  IT: Pericoloso per l'ambiente                  NL: Milieugevaarlijk                  PT: Perigoso para o ambiente                  SV: Miljöfarlig'</p> <p>For full text of R- &amp; S- phrases: see Section 15.</p>								
<b>2.2 Label Elements</b>	<p>Pictogram(s):</p>  <p>Signal word: Warning</p> <p>Hazard statement(s):                  H315 – Causes skin irritation                  H319 – Causes serious eye irritation                  H411 – Toxic to aquatic life with long lasting effects</p> <p>Precautionary statement(s):                  P302+ P352 - IF ON SKIN: Wash with plenty of soap and water                  P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.                  P273 – Avoid release to the environment</p>								
<b>NFPA Scale: 0-4</b>									
<b>HMIS (U.S.A.) Scale: 0-4</b>	<table border="1" style="width: 100%;"> <tr> <td style="background-color: #e6f2ff;">HEALTH</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: #ffcccc;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #ffffcc;">PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">B</td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B
HEALTH	1								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	B								
<b>2.3 Other Hazards</b>	<p><b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT.  <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.</p>								

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

\*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Zinc Chloride	7646-85-7	231-592-0	 Warning. 4 H302 Harmful if swallowed.  Danger. 1B. H314 Causes severe skin burns and eye damage.  Warning. 1. H410 Very toxic to aquatic life with long lasting effects.	≤ 0.5

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	No unusual fire or explosion hazards expected.
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

### Section 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

#### 6.2 Environmental precautions

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

#### 6.3 Methods and materials for containment and cleaning up

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

### Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.  
Wash thoroughly after handling.  
Avoid breathing vapor.

**7.2 Conditions for safe storage, including any incompatibilities.**

Store in well ventilated area.  
Keep container tightly closed.  
Store at 15-30 °C.

**7.3 Specific end use(s).**

See section 1.2

### Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<b>Exposure Limits:</b> N/A
<b>8.2 Exposure controls</b>	<b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. <b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid
<b>Color</b>	Transparent, colorless.
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	Unknown
<b>pH</b>	5.7 ± 0.3
<b>Melting Point/ Freezing Point</b>	Unknown
<b>Initial Boiling Point</b>	Unknown
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	Unknown
<b>Flammability (solid, gas)</b>	Unknown
<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	Unknown
<b>Vapor Density</b>	Unknown

<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-Ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	Unknown
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

### Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.
<b>10.5 Incompatible Materials</b>	Strong oxidizers.
<b>10.6 Hazardous Decomposition Materials</b>	Hydrogen chloride gas, metal oxides.

### Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects.</b>	<p><b>Acute Toxicity.</b> No relevant data available</p> <p><b>Skin Corrosion/Irritation.</b> Irritating to skin and mucous membranes.</p> <p><b>Serious Eye Damage/Irritation.</b> Seriously irritating to eye.</p> <p><b>Respiratory or skin sensitization.</b> No relevant data available.</p> <p><b>Germ Cell Mutagenicity.</b> No relevant data available.</p>
<b>Carcinogenicity.</b>	<p><b>International Agency for Research on Cancer (IARC).</b> None of the components are listed.</p> <p><b>National Toxicology Program (NTP).</b> None of the components are listed.</p>

### Section 12. Ecological Information

<b>12.1 Toxicity</b>	<p><b>Fish:</b> No relevant studies identified.</p> <p><b>Crustacea:</b> No relevant studies identified.</p> <p><b>Algae/Aquatic Plants:</b> No relevant studies identified.</p> <p><b>Other Organisms:</b> No relevant studies identified.</p> <p><b>Other:</b> Known to be harmful to aquatic life.</p>
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.
<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.

<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.

### Section 13. Disposal Considerations

<b>13.1 Waste Disposal Methods.</b>	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
<b>Product/Packaging Disposal.</b>	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
<b>Other Disposal Recommendations.</b>	No relevant data available.

### Section 14. Transport Information

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: 3082 ADR/RID: 3082 IMDG: 3082 IATA: 3082
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Zinc chloride) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Zinc chloride) IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Zinc chloride) DOT: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Zinc chloride)
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT: 9</b> <b>IATA: 9</b> <b>IMDG: 9</b> <b>ADR/RID: 9</b>
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: III IMDG: III IATA: III DOT: III
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

### Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	<i>Zinc Chloride</i> California Massachusetts Minnesota New Jersey Pennsylvania

<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
<b>R phrases</b>	<p><b>R36/38</b>            EN: Irritating to eyes and skin.            DA: Irriterer øjnene og huden            DE: Reizt die Augen und die Haut.            EL: Ερεθίζει τα μάτια και το δέρμα.            ES: Irrita los ojos y la piel.            FR: Irritant pour les yeux et la peau.            IT: Irritante per gli occhi e la pelle.            NL: Irriterend voor de ogen en de huid.            PT: Irritante para os olhos e pele.            SV: Irriterar ögonen och huden.</p> <p><b>R50/53</b>            EN: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.            DA: Meget giftig for organismer, der lever i vand; kan forårsage uønskede langtidsvirkninger i vandmiljøet.            DE: Sehr giftig für Wasserorganismen, kann in Gewässern längerfristig schädliche Wirkungen haben.            EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς, μπορεί να προκαλέσει μακροχρόνιες δυσμενείς επιπτώσεις στο υδάτινο περιβάλλον.            ES: Muy tóxico para los organismos acuáticos, puede provocar a largo plazo efectos negativos en el medio ambiente acuático.            FR: Très toxique pour les organismes aquatiques, peut entraîner des effets néfastes a long terme pour l'environnement aquatique.            IT: Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico.            NL: Zeer vergiftig voor in het water levende organismen; kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.            PT: Muito tóxico para os organismos aquáticos, podendo causar efeitos nefastos a longo prazo no ambiente aquático.            SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.</p>
<b>S phrases</b>	<p><b>S26</b>            EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.            DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes.            DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren.            EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή.            ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.            FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste.            IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico.            NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen.            PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista.            SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p><b>S36/37/39</b>            EN: Wear suitable protective clothing, gloves and eye/face protection.            DA: Brug særligt arbejdstøj, egnede beskyttelseshandsker og -briller/ansigtsskærm.            DE: Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen.            EL: Φοράτε κατάλληλη προστατευτική ενδυμασία, γάντια και συσκευή προστασίας ματιών/προσώπου</p>

	<p>ES: Úsense indumentaria y guantes adecuados y protección para los ojos/la cara. FR: Porter un vêtement de protection approprié, des gants et un appareil de protection des yeux/du visage. IT: Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte beschermende kleding, handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar vestuário de protecção, luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p> <p><b>S60</b> EN: This material and its container must be disposed of as hazardous waste. DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning. DE: Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen. EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας. ES: Elimínense el producto y su recipiente como residuos peligrosos. FR: Éliminer le produit et son récipient comme un déchet dangereux. IT: Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi. NL: Deze stof en de verpakking als gevaarlijk afval afvoeren. PT: Este produto e o seu recipiente devem ser eliminados como resíduos perigosos. SV: Detta material och dess behållare skall tas om hand som farligt avfall.</p> <p><b>S61</b> EN: Avoid release to the environment. Refer to special instructions/Safety data sheets. DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning. DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen. EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας. ES: Evítense su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad. FR: Éviter le rejet dans l'environnement. Consulter les instructions spéciales/la fiche de données de sécurité. IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza. NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart. PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança. SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.</p>
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### Section 16. Other Information


The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.





### Section 1. Identification of the Substance/Mixture and the Company

<b>1.1 Product Identifier</b>	Product Name: Gelatin (4%), Acidulated Product Number: GSA	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	ScyTek Laboratories, Inc.
	<b>Address</b>	205 South 600 West Logan, Utah 84321 U.S.A.
	<b>Phone Number</b>	800-729-8350
	<b>Fax Number</b>	435-755-0015
	<b>e-mail</b>	msds@scytek.com
	<b>Website</b>	scytek.com

### Section 2. Hazards Identification

<b>2.1 GHS Classification</b>	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H320	
<b>Classification: Directive 1999/45/EC</b>	 <p><b>Xi R36/38; S24/25, S37/39</b></p> EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande	
	For full text of R- & S- phrases: see Section 15.	



<b>2.2 Label Elements</b>	Pictogram(s):   Signal word: Warning  Hazard statement(s): H315 – Causes skin irritation H320 – Causes eye irritation  Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.		
<b>NFPA Scale: 0-4</b>			
<b>HMIS (U.S.A.) Scale: 0-4</b>	HEALTH	1	
	FLAMMABILITY	0	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	A	
<b>2.3 Other Hazards</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.		

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

\*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Gelatin	9000-70-8	232-554-6	n/a	≤ 5
Acetic Acid	64-19-7	200-580-7	 Warning. 3, H226 Flammable liquid and vapour.   Danger. 1A H314 Causes severe skin burns and eye damage.	≤ 0.1

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

**4.2 Most important symptoms and effects, both acute and delayed**

See section 2.2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	No unusual fire or explosion hazards expected.
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

### Section 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

**6.2 Environmental precautions**

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

**6.3 Methods and materials for containment and cleaning up**

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

### Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

**7.2 Conditions for safe storage, including any incompatibilities.**

Store in well ventilated area.

Keep container tightly closed.

Store at 2-8°C.

**7.3 Specific end use(s).**

See section 1.2

### Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<p><b>Exposure Limits:</b> Acetic acid, glacial; <b>ACGIH TLV:</b> 15ppm (37 mg/m<sup>3</sup>) STEL 10 ppm (25 mg/m<sup>3</sup>) TWA <b>NIOSH REL:</b> 15 ppm (37 mg/m<sup>3</sup>) STEL 10 ppm (25 mg/m<sup>3</sup>) TWA <b>OSHA PEL:</b> 10 ppm (25 mg/m<sup>3</sup>) TWA</p>
<b>8.2 Exposure controls</b>	<p><b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required.</p>

	<p><b>Skin protection.</b> Protective clothing is required.</p> <p><b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove.</p> <p><b>Respiratory protection.</b> Avoid breathing vapor.</p> <p><b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.</p>
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Gelatinous solid/liquid depending on temperature.
<b>Color</b>	Slightly amber.
<b>Odor</b>	Very slight odor.
<b>Odor Threshold</b>	Unknown
<b>pH</b>	Unknown
<b>Melting Point/ Freezing Point</b>	Unknown
<b>Initial Boiling Point</b>	Unknown
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	Unknown
<b>Flammability (solid, gas)</b>	Unknown
<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	Unknown
<b>Vapor Density</b>	Unknown
<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	Unknown
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

### Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.

<b>10.5 Incompatible Materials</b>	None known.
<b>10.6 Hazardous Decomposition Materials</b>	Carbon oxides.

### Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects.</b>	<p><b>Acute Toxicity.</b> No relevant data available</p> <p><b>Skin Corrosion/Irritation.</b> Irritating to skin and mucous membranes.</p> <p><b>Serious Eye Damage/Irritation.</b> Irritating to eye.</p> <p><b>Respiratory or skin sensitization.</b> No relevant data available.</p> <p><b>Germ Cell Mutagenicity.</b> No relevant data available.</p>
<b>Carcinogenicity.</b>	<p><b>International Agency for Research on Cancer (IARC).</b> None of the components are listed.</p> <p><b>National Toxicology Program (NTP).</b> None of the components are listed.</p>

### Section 12. Ecological Information

<b>12.1 Toxicity</b>	<p><b>Fish:</b> No relevant studies identified.</p> <p><b>Crustacea:</b> No relevant studies identified.</p> <p><b>Algae/Aquatic Plants:</b> No relevant studies identified.</p> <p><b>Other Organisms:</b> No relevant studies identified.</p>
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.
<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.
<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<p><b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT.</p> <p><b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.</p>

### Section 13. Disposal Considerations

<b>13.1 Waste Disposal Methods.</b>	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
<b>Product/Packaging Disposal.</b>	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
<b>Other Disposal Recommendations.</b>	No relevant data available.

**Section 14. Transport Information**

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

**Section 15. Regulatory Information**

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	None of the components in this mixture are listed.
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
<b>R phrases</b>	<b>R36/38</b> EN: Irritating to eyes and skin. DA: Irriterer øjnene og huden DE: Reizt die Augen und die Haut. EL: Ερεθίζει τα μάτια και το δέρμα. ES: Irrita los ojos y la piel. FR: Irritant pour les yeux et la peau. IT: Irritante per gli occhi e la pelle. NL: Irriterend voor de ogen en de huid. PT: Irritante para os olhos e pele. SV: Irriterar ögonen och huden
<b>S phrases</b>	<b>S24/25</b> EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle.

	<p>NL: Aanraking met de ogen en de huid vermijden.          PT: Evitar o contacto com a pele e os olhos.          SV: Undvik kontakt med huden och ögonen.  <b>S37/39</b>          EN: Wear suitable gloves and eye/face protection.          DA: Brug egnede beskyttelseshandsker og -briller/ansigtsskærm under arbejdet.          DE: Bei der Arbeit geeignete Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen.          EL: Φοράτε κατάλληλα γάντια και συσκευή προστασίας ματιών/προσώπου.          ES: Úsense guantes adecuados y protección para los ojos/la cara.          FR: Porter des gants appropriés et un appareil de protection des yeux/du visage.          IT: Usare guanti adatti e proteggersi gli occhi/la faccia.          NL: Draag geschikte handschoenen en een beschermingsmiddel voor de ogen/het gezicht.          PT: Usar luvas e equipamento protector para os olhos /face adequados.          SV: Använd lämpliga skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p>
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**Section 16. Other Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.




### Section 1. Identification of the Substance/Mixture and the Company

<b>1.1 Product Identifier</b>	Product Name: Silver Nitrate Solution (0.5%), Acidulated Product Number: SNB	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	ScyTek Laboratories, Inc.
	<b>Address</b>	205 South 600 West Logan, Utah 84321 U.S.A.
	<b>Phone Number</b>	800-729-8350
	<b>Fax Number</b>	435-755-0015
	<b>e-mail</b>	msds@scytek.com
	<b>Website</b>	scytek.com

### Section 2. Hazards Identification

<b>2.1 GHS Classification</b>	Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319 Acute aquatic toxicity (Category 1) – H400 Chronic aquatic toxicity (Category 1) – H410	
<b>Classification: Directive 1999/45/EC</b>		Xi EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande









	 <p><b>N:</b>                  EN: Dangerous for the environment                  DA: Miljøfarlig                  DE: Umweltgefährlich                  EL: Επικίνδυνο για το περιβάλλον                  ES: Peligroso para el medio ambiente                  FR: Dangereux pour l'environnement                  IT: Pericoloso per l'ambiente                  NL: Milieugevaarlijk                  PT: Perigoso para o ambiente                  SV: Miljöfarlig'</p> <p>For full text of R- &amp; S- phrases: see Section 15.</p>								
<b>2.2 Label Elements</b>	<p>Pictogram(s):</p>  <p>Signal word: Warning</p> <p>Hazard statement(s):                  H315 – Causes skin irritation.                  H319 – Causes serious eye irritation                  H410 – Very toxic to aquatic life with long lasting effects.</p> <p>Precautionary statement(s):                  P302+ P352 - IF ON SKIN: Wash with plenty of soap and water                  P305 + P351 + - IF IN EYES: Rinse cautiously with water for several minutes.                  P337 + P 313 - If eye irritation persists get medical advice/attention.</p>								
<b>NFPA Scale: 0-4</b>									
<b>HMIS (U.S.A.) Scale: 0-4</b>	<table border="1"> <tr> <td>HEALTH</td> <td style="text-align: center;">1</td> </tr> <tr> <td>FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">B</td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B
HEALTH	1								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	B								
<b>2.3 Other Hazards</b>	<p><b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT.  <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.</p>								

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

\*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Silver Nitrate	7761-88-8	231-853-9	 Danger. 2. H272 May intensify fire; oxidizer.  Warning. 4 H302 Harmful if swallowed.  Danger. 1B H314 Causes severe skin burns and eye damage.  Warning. H410 Very toxic to aquatic life with long lasting effects.	≤ 0.5
Acetic Acid	64-19-7	200-580-7	 Warning. 3, H226 Flammable liquid and vapour.  Danger. 1A H314 Causes severe skin burns and eye damage.	≤ .02

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	None known
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

### Section 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

**6.2 Environmental precautions**

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

**6.3 Methods and materials for containment and cleaning up**

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

### Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

**7.2 Conditions for safe storage, including any incompatibilities.**

Store in well ventilated area.

Keep container tightly closed.

Store at 2-8°C.

**7.3 Specific end use(s).**

See section 1.2

### Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<b>Exposure Limits:</b> N/A
<b>8.2 Exposure controls</b>	<b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. <b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid
<b>Color</b>	Transparent, colorless
<b>Odor</b>	Unknown
<b>Odor Threshold</b>	Unknown
<b>pH</b>	Unknown
<b>Melting Point/ Freezing Point</b>	Unknown
<b>Initial Boiling Point</b>	Unknown
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	Unknown
<b>Flammability (solid, gas)</b>	Unknown
<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	Unknown
<b>Vapor Density</b>	Unknown
<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-Ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	Unknown
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

### Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.
<b>10.5 Incompatible Materials</b>	Oxidizers, alkalis, antimony salts, arsenates, carbonates and phosphates.
<b>10.6 Hazardous Decomposition Materials</b>	Carbon oxides, nitrogen oxides, oxides of silver.

### Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects.</b>	<p><b>Acute Toxicity.</b> No relevant data available</p> <p><b>Skin Corrosion/Irritation.</b> Irritating to skin and mucous membranes.</p> <p><b>Serious Eye Damage/Irritation.</b> Seriously irritating to eye.</p> <p><b>Respiratory or skin sensitization.</b></p>
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	No relevant data available. <b>Germ Cell Mutagenicity.</b> No relevant data available.
<b>Carcinogenicity.</b>	<b>International Agency for Research on Cancer (IARC).</b> None of the components are listed. <b>National Toxicology Program (NTP).</b> None of the components are listed.

### Section 12. Ecological Information

<b>12.1 Toxicity</b>	<b>Fish:</b> No relevant studies identified. <b>Crustacea:</b> No relevant studies identified. <b>Algae/Aquatic Plants:</b> No relevant studies identified. <b>Other Organisms:</b> No relevant studies identified.
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.
<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.
<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.

### Section 13. Disposal Considerations

<b>13.1 Waste Disposal Methods.</b>	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
<b>Product/Packaging Disposal.</b>	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
<b>Other Disposal Recommendations.</b>	No relevant data available.

### Section 14. Transport Information

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: 3082 ADR/RID: 3082 IMDG: 3082 IATA: 3082
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) IMDG: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) IATA: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) DOT: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate)
<b>14.3 Transport Hazard Class(es)</b>	DOT: 9 IATA: 9 IMDG: 9 ADR/RID: 9
<b>14.4 Packing Group</b>	ADR/RID: III

<b>DOT, IATA,IMDG, ADR</b>	IMDG: III IATA: III DOT: III
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> Yes
<b>14.6 Special Precautions for User</b>	Not applicable.

### Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	None of the components in this mixture are listed.
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
<b>R phrases</b>	<p><b>R36/38</b> EN: Irritating to eyes and skin. DA: Irriterer øjnene og huden DE: Reizt die Augen und die Haut. EL: Ερεθίζει τα μάτια και το δέρμα. ES: Irrita los ojos y la piel. FR: Irritant pour les yeux et la peau. IT: Irritante per gli occhi e la pelle. NL: Irriterend voor de ogen en de huid. PT: Irritante para os olhos e pele. SV: Irriterar ögonen och huden.</p> <p><b>R50/53</b> EN: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. DA: Meget giftig for organismer, der lever i vand; kan forårsage uønskede langtidsvirkninger i vandmiljøet. DE: Sehr giftig für Wasserorganismen, kann in Gewässern längerfristig schädliche Wirkungen haben. EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς, μπορεί να προκαλέσει μακροχρόνιες δυσμενείς επιπτώσεις στο υδάτινο περιβάλλον. ES: Muy tóxico para los organismos acuáticos, puede provocar a largo plazo efectos negativos en el medio ambiente acuático. FR: Tres toxique pour les organismes aquatiques, peut entrainer des effets nefastes a long terme pour l'environnement aquatique. IT: Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico. NL: Zeer vergiftig voor in het water levende organismen; kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken. PT: Muito tóxico para os organismos aquáticos, podendo causar efeitos nefastos a longo prazo no ambiente aquático. SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.</p>
<b>S phrases</b>	<p><b>S26</b> EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p>

	<p>DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes.</p> <p>DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren.</p> <p>EL: Σε περίπτωση επαφής με τα μάτια πλύνετέ τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή.</p> <p>ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.</p> <p>FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste.</p> <p>IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico.</p> <p>NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen.</p> <p>PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista.</p> <p>SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p><b>S45</b></p> <p>EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt.</p> <p>DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).</p> <p>EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό).</p> <p>ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresela la etiqueta).</p> <p>FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette).</p> <p>IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).</p> <p>NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).</p> <p>PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo).</p> <p>SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p> <p><b>S60</b></p> <p>EN: This material and its container must be disposed of as hazardous waste.</p> <p>DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.</p> <p>DE: Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen.</p> <p>EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας.</p> <p>ES: Elimínense el producto y su recipiente como residuos peligrosos.</p> <p>FR: Eliminer le produit et son recipient comme un dechet dangereux.</p> <p>IT: Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi.</p> <p>NL: Deze stof en de verpakking als gevaarlijk afval afvoeren.</p> <p>PT: Este produto e o seu recipiente devem ser eliminados como resíduos perigosos.</p> <p>SV: Detta material och dess behållare skall tas om hand som farligt avfall.</p> <p><b>S61</b></p> <p>EN: Avoid release to the environment. Refer to special instructions/Safety data sheets.</p> <p>DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.</p> <p>DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen.</p> <p>EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας.</p> <p>ES: Evítense su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.</p> <p>FR: Eviter le rejet dans l'environnement. Consulter les instructions speciales/la fiche de donnees de securite.</p> <p>IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza.</p>
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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - [www.scytek.com](http://www.scytek.com)

NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart.  
PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança.  
SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.

**Section 16. Other Information**


The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.





### Section 1. Identification of the Substance/Mixture and the Company

<b>1.1 Product Identifier</b>	Product Name: Hydroquinone Solution (0.1%), Acidulated Product Number: HSA	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	ScyTek Laboratories, Inc.
	<b>Address</b>	205 South 600 West Logan, Utah 84321 U.S.A.
	<b>Phone Number</b>	800-729-8350
	<b>Fax Number</b>	435-755-0015
	<b>e-mail</b>	msds@scytek.com
	<b>Website</b>	scytek.com

### Section 2. Hazards Identification

<b>2.1 GHS Classification</b>	Carcinogenicity (Category 2) – H351 Eye irritation (Category 2) – H320	
<b>Classification: Directive 1999/45/EC</b>	 <p><b>Xn R40; S36/37/39, S45, S61</b>            EN: Harmful            DA: Sundhedsskadelig            DE: Gesundheitsschädlich            EL: Επιβλαβές            ES: Nocivo            FR: Nocif            IT: Nocivo            NL: Schadelijk            PT: Nocivo            SV: Hälsoskadlig</p>	
	For full text of R- & S- phrases: see Section 15.	






<b>2.2 Label Elements</b>	Pictogram(s): 		
	Signal word:	Warning	
	Hazard statement(s):	H351 – Suspected of causing cancer H320 – Causes eye irritation	
	Precautionary statement(s):	P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes. P308 + P311 – IF exposed or concerned: Call a POISON CENTER/ doctor.	
<b>NFPA Scale: 0-4</b>			
<b>HMIS (U.S.A.) Scale: 0-4</b>	HEALTH	1	
	FLAMMABILITY	0	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	A	
<b>2.3 Other Hazards</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.		



### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

\*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Hydroquinone	123-31-9	204-617-8	 Warning. 2 H351 Suspected of causing cancer. 2 H341 Suspected of causing genetic defects  Warning. 4 H302 Harmful if swallowed.  Danger. 1 H318 Causes serious eye damage.  Warning. 1. H317 May cause an allergic skin reaction.  Warning. 1. H400 Very toxic to aquatic life	≤ 0.1

Acetic Acid	64-19-7	200-580-7	 Warning. 3, H226 Flammable liquid and vapour.   Danger. 1A H314 Causes severe skin burns and eye damage.	≤ 0.1
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### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	No unusual fire or explosion hazards expected.
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

### Section 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

#### 6.2 Environmental precautions

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

#### 6.3 Methods and materials for containment and cleaning up

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

### Section 7. Handling and Storage

#### 7.1 Precautions for safe handling.

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

**7.2 Conditions for safe storage, including any incompatibilities.**

Store in well ventilated area.  
Keep container tightly closed.  
Store at 15-30°C.

**7.3 Specific end use(s).**

See section 1.2

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

<b>8.1 Control parameters</b>	<p><b>Exposure Limits:</b> Acetic acid, glacial; <b>ACGIH TLV:</b> 15ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA <b>NIOSH REL:</b> 15 ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA <b>OSHA PEL:</b> 10 ppm (25 mg/m3) TWA</p> <p><i>Hydroquinone:</i> <b>NIOSH REL</b> : C 2 mg/m<sup>3</sup> [15-minute] <b>OSHA PEL</b> : TWA 2 mg/m<sup>3</sup></p>
<b>8.2 Exposure controls</b>	<p><b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. <b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.</p>
<b>Engineering Controls</b>	<p>Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.</p>

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid
<b>Color</b>	Slightly yellow to clear.
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	Unknown
<b>pH</b>	3.5 ± 0.5
<b>Melting Point/ Freezing Point</b>	Unknown
<b>Initial Boiling Point</b>	Unknown
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	Unknown
<b>Flammability (solid, gas)</b>	Unknown

<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	Unknown
<b>Vapor Density</b>	Unknown
<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-Ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	Unknown
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

### Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.
<b>10.5 Incompatible Materials</b>	Alkalis, strong oxidizers, oxygen, sodium hydroxide.
<b>10.6 Hazardous Decomposition Materials</b>	Carbon oxides.

### Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects.</b>	<p><b>Acute Toxicity.</b> No relevant data available</p> <p><b>Skin Corrosion/Irritation.</b> May be irritating to skin and mucous membranes.</p> <p><b>Serious Eye Damage/Irritation.</b> Irritating to eye.</p> <p><b>Respiratory or skin sensitization.</b> No relevant data available.</p> <p><b>Germ Cell Mutagenicity.</b> No relevant data available.</p>
<b>Carcinogenicity.</b>	<p><b>International Agency for Research on Cancer (IARC).</b> None of the components are listed.</p> <p><b>National Toxicology Program (NTP).</b> None of the components are listed.</p>

### Section 12. Ecological Information

<b>12.1 Toxicity</b>	<p><b>Fish:</b> No relevant studies identified.</p> <p><b>Crustacea:</b> No relevant studies identified.</p> <p><b>Algae/Aquatic Plants:</b> No relevant studies identified.</p> <p><b>Other Organisms:</b> No relevant studies identified.</p>
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.

<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.
<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.

### Section 13. Disposal Considerations

<b>13.1 Waste Disposal Methods.</b>	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
<b>Product/Packaging Disposal.</b>	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
<b>Other Disposal Recommendations.</b>	No relevant data available.

### Section 14. Transport Information

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

### Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	Acetic Acid CAS# 64-19-7 California

	<p>Massachusetts Minnesota New Jersey Pennsylvania Rhode Island</p> <p>Hydroquinone, CAS#: 123-31-9 California Massachusetts Minnesota New Jersey Pennsylvania</p>
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
<b>R phrases</b>	<p><b>R40</b> EN: Limited evidence of a carcinogenic effect. DA: Mulighed for kræftfremkaldende effekt. DE: Verdacht auf krebserzeugende Wirkung. EL: Υποππο καρκινογένεσης. ES: Posibles efectos cancerígenos. FR: Effet cancerogene suspecte ? preuves insuffisantes IT: Possibilità di effetti cancerogeni - prove insufficienti. NL: Carcinogene effecten zijn niet uitgesloten. PT: Possibilidade de efeitos cancerígenos. SV: Misstänks kunna ge cancer.</p>
<b>S phrases</b>	<p><b>S36/37/39</b> EN: Wear suitable protective clothing, gloves and eye/face protection. DA: Brug særligt arbejdstøj, egnede beskyttelseshandsker og -briller/ansigtsskærm. DE: Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. EL: Φοράτε κατάλληλη προστατευτική ενδυμασία, γάντια και συσκευή προστασίας ματιών/προσώπου ES: Úsense indumentaria y guantes adecuados y protección para los ojos/la cara. FR: Porter un vêtement de protection appropriée, des gants et un appareil de protection des yeux/du visage. IT: Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte beschermende kleding, handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar vestuário de protecção, luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p> <p><b>S45</b> EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt. DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen). EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό). ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta). FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette). IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta). NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).</p>

	<p>PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo).</p> <p>SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p> <p><b>S61</b></p> <p>EN: Avoid release to the environment. Refer to special instructions/Safety data sheets.</p> <p>DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.</p> <p>DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen.</p> <p>EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδωμένων ασφαλείας.</p> <p>ES: Evítese su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.</p> <p>FR: Eviter le rejet dans l'environnement. Consulter les instructions speciales/la fiche de donnees de securite.</p> <p>IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza.</p> <p>NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart.</p> <p>PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança.</p> <p>SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.</p>
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### Section 16. Other Information


The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.






### Section 1. Identification of the Substance/Mixture and the Company

<b>1.1 Product Identifier</b>	Product Name: Silver Nitrate Solution (2%), Acidulated Product Number: SNA	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	ScyTek Laboratories, Inc.
	<b>Address</b>	205 South 600 West Logan, Utah 84321 U.S.A.
	<b>Phone Number</b>	800-729-8350
	<b>Fax Number</b>	435-755-0015
	<b>e-mail</b>	msds@scytek.com
	<b>Website</b>	scytek.com

### Section 2. Hazards Identification

<b>2.1 GHS Classification</b>	Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319 Acute aquatic toxicity (Category 1) – H400 Chronic aquatic toxicity (Category 1) – H410	
<b>Classification: Directive 1999/45/EC</b>	 <p><b>Xi</b>                  EN: Irritant                  DA: Lokalirriterende                  DE: Reizend                  EL: Ερεθιστικό                  ES: Irritante                  FR: Irritant                  IT: Irritante                  NL: Irriterend                  PT: Irritante                  SV: Irriterande</p>	







	 <p><b>N:</b>  EN: Dangerous for the environment  DA: Miljøfarlig  DE: Umweltgefährlich  EL: Επικίνδυνο για το περιβάλλον  ES: Peligroso para el medio ambiente  FR: Dangereux pour l'environnement  IT: Pericoloso per l'ambiente  NL: Milieugevaarlijk  PT: Perigoso para o ambiente  SV: Miljöfarlig'</p> <p>For full text of R- &amp; S- phrases: see Section 15.</p>								
<b>2.2 Label Elements</b>	<p>Pictogram(s):</p>  <p>Signal word: Warning</p> <p>Hazard statement(s):  H315 – Causes skin irritation.  H319 – Causes serious eye irritation  H410 – Very toxic to aquatic life with long lasting effects.</p> <p>Precautionary statement(s):  P302+ P352 - IF ON SKIN: Wash with plenty of soap and water  P305 + P351 + - IF IN EYES: Rinse cautiously with water for several minutes.  P337 + P 313 - If eye irritation persists get medical advice/attention.</p>								
<b>NFPA Scale: 0-4</b>									
<b>HMIS (U.S.A.) Scale: 0-4</b>	<table border="1"> <tr> <td>HEALTH</td> <td>1</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>B</td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B
HEALTH	1								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	B								
<b>2.3 Other Hazards</b>	<p><b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT.  <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.</p>								

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

\*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Silver Nitrate	7761-88-8	231-853-9	 Danger. 2. H272 May intensify fire; oxidizer.  Warning. 4 H302 Harmful if swallowed.  Danger. 1B H314 Causes severe skin burns and eye damage.  Warning. H410 Very toxic to aquatic life with long lasting effects.	≤ 2
Acetic Acid	64-19-7	200-580-7	 Warning. 3, H226 Flammable liquid and vapour.  Danger. 1A H314 Causes severe skin burns and eye damage.	≤ .02

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	None known
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

### Section 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.

**6.2 Environmental precautions**

Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.

**6.3 Methods and materials for containment and cleaning up**

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

### Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

**7.2 Conditions for safe storage, including any incompatibilities.**

Store in well ventilated area.

Keep container tightly closed.

Store at 2-8°C.

**7.3 Specific end use(s).**

See section 1.2

### Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<b>Exposure Limits:</b> N/A
<b>8.2 Exposure controls</b>	<b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. <b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid
<b>Color</b>	Transparent, colorless
<b>Odor</b>	Unknown
<b>Odor Threshold</b>	Unknown
<b>pH</b>	Unknown
<b>Melting Point/ Freezing Point</b>	Unknown
<b>Initial Boiling Point</b>	Unknown
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	Unknown
<b>Flammability (solid, gas)</b>	Unknown
<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	Unknown
<b>Vapor Density</b>	Unknown
<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-Ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	Unknown
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

### Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.
<b>10.5 Incompatible Materials</b>	Oxidizers, alkalis, antimony salts, arsenates, carbonates and phosphates.
<b>10.6 Hazardous Decomposition Materials</b>	Carbon oxides, nitrogen oxides, oxides of silver.

### Section 11. Toxicological Information

<b>11.1 Information on Toxicological Effects.</b>	<p><b>Acute Toxicity.</b> No relevant data available</p> <p><b>Skin Corrosion/Irritation.</b> Irritating to skin and mucous membranes.</p> <p><b>Serious Eye Damage/Irritation.</b> Seriously irritating to eye.</p> <p><b>Respiratory or skin sensitization.</b> No relevant data available.</p>
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	<b>Germ Cell Mutagenicity.</b> No relevant data available.
<b>Carcinogenicity.</b>	<b>International Agency for Research on Cancer (IARC).</b> None of the components are listed. <b>National Toxicology Program (NTP).</b> None of the components are listed.

### Section 12. Ecological Information

<b>12.1 Toxicity</b>	<b>Fish:</b> No relevant studies identified. <b>Crustacea:</b> No relevant studies identified. <b>Algae/Aquatic Plants:</b> No relevant studies identified. <b>Other Organisms:</b> No relevant studies identified.
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.
<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.
<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.

### Section 13. Disposal Considerations

<b>13.1 Waste Disposal Methods.</b>	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
<b>Product/Packaging Disposal.</b>	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
<b>Other Disposal Recommendations.</b>	No relevant data available.

### Section 14. Transport Information

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: 3082 ADR/RID: 3082 IMDG: 3082 IATA: 3082
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) IMDG: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) IATA: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate) DOT: Environmentally hazardous substance, liquid, n.o.s.(Silver nitrate)
<b>14.3 Transport Hazard Class(es)</b>	DOT: 9 IATA: 9 IMDG: 9 ADR/RID: 9
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: III IMDG: III IATA: III DOT: III

<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> Yes
<b>14.6 Special Precautions for User</b>	Not applicable.

### Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	None of the components in this mixture are listed.
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
<b>R phrases</b>	<p><b>R36/38</b>            EN: Irritating to eyes and skin.            DA: Irriterer øjnene og huden            DE: Reizt die Augen und die Haut.            EL: Ερεθίζει τα μάτια και το δέρμα.            ES: Irrita los ojos y la piel.            FR: Irritant pour les yeux et la peau.            IT: Irritante per gli occhi e la pelle.            NL: Irriterend voor de ogen en de huid.            PT: Irritante para os olhos e pele.            SV: Irriterar ögonen och huden.</p> <p><b>R50/53</b>            EN: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.            DA: Meget giftig for organismer, der lever i vand; kan forårsage uønskede langtidsvirkninger i vandmiljøet.            DE: Sehr giftig für Wasserorganismen, kann in Gewässern längerfristig schädliche Wirkungen haben.            EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς, μπορεί να προκαλέσει μακροχρόνιες δυσμενείς επιπτώσεις στο υδάτινο περιβάλλον.            ES: Muy tóxico para los organismos acuáticos, puede provocar a largo plazo efectos negativos en el medio ambiente acuático.            FR: Très toxique pour les organismes aquatiques, peut entraîner des effets néfastes a long terme pour l'environnement aquatique.            IT: Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico.            NL: Zeer vergiftig voor in het water levende organismen; kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.            PT: Muito tóxico para os organismos aquáticos, podendo causar efeitos nefastos a longo prazo no ambiente aquático.            SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.</p>
<b>S phrases</b>	<p><b>S26</b>            EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.            DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes.            DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren.            EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή.</p>

	<p>ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.</p> <p>FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste.</p> <p>IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico.</p> <p>NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen.</p> <p>PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista.</p> <p>SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p><b>S45</b></p> <p>EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt.</p> <p>DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).</p> <p>EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό).</p> <p>ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta).</p> <p>FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette).</p> <p>IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).</p> <p>NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).</p> <p>PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo).</p> <p>SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p> <p><b>S60</b></p> <p>EN: This material and its container must be disposed of as hazardous waste.</p> <p>DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.</p> <p>DE: Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen.</p> <p>EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας.</p> <p>ES: Elimínense el producto y su recipiente como residuos peligrosos.</p> <p>FR: Eliminer le produit et son récipient comme un déchet dangereux.</p> <p>IT: Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi.</p> <p>NL: Deze stof en de verpakking als gevaarlijk afval afvoeren.</p> <p>PT: Este produto e o seu recipiente devem ser eliminados como resíduos perigosos.</p> <p>SV: Detta material och dess behållare skall tas om hand som farligt avfall.</p> <p><b>S61</b></p> <p>EN: Avoid release to the environment. Refer to special instructions/Safety data sheets.</p> <p>DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.</p> <p>DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen.</p> <p>EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/.ελτίο δεδομένων ασφαλείας.</p> <p>ES: Evítense su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.</p> <p>FR: Eviter le rejet dans l'environnement. Consulter les instructions spéciales/la fiche de données de sécurité.</p> <p>IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza.</p> <p>NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart.</p> <p>PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança.</p> <p>SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.</p>
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**Section 16. Other Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.