




Section 1. Identification

1.1 Product Identifier	Product Name: GUM Mastic Solution (2.5%) Product Number: SSC1083	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification

2.1 GHS Classification	Flammable liquids (Category 2) – H225 Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319 Specific target organ toxicity (Category 3), Central nervous system – H336
Classification: Directive 1999/45/EC	 <p>F R11, R36; S7, S16, S24/25 S26</p> EN: Highly flammable DA: Meget brandfarlig DE: Leichtentzündlich EL: Πολύ εύφλεκτο ES: Fácilmente inflamable FR: Facilement inflammable IT: Facilmente infiammabile NL: Licht ontvlambaar PT: Facilmente inflamável SV: Mycket brandfarligt For full text of R- & S- phrases: see Section 15.




2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H226 – Flammable liquid and vapour H319 – Causes serious eye irritation H315 – Causes skin irritation H336 – May cause drowsiness or dizziness Precautionary statement(s): P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 – IF IN EYES: Rinse cautiously with water for several minutes.								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<table border="1"> <tr> <td>HEALTH</td> <td>1</td> </tr> <tr> <td>FLAMMABILITY</td> <td>3</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>G</td> </tr> </table>	HEALTH	1	FLAMMABILITY	3	PHYSICAL HAZARD	0	PERSONAL PROTECTION	G
HEALTH	1								
FLAMMABILITY	3								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	G								
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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	%
Ethanol	64-17-5	200-578-6	 Danger. 2 H225 Highly flammable liquid and vapour.	≤ 95
Isopropanol	67-63-0	200-661-7	 Warning. 2. H319 Causes serious eye irritation. 3. H336 May cause drowsiness or dizziness.  Danger. 3 H225 Highly flammable liquid and vapour.	≤ 5
Gum Mastic	61789-92-2	263-098-6	N/A	≤ 3

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 medical attention if irritation continues.

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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	No unusual fire or explosive hazards expected
5.3 Advice for firefighters	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

8.1 Control parameters	<u>Exposure Limits:</u> Ethanol:
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	NIOSH REL: 1000 ppm (1900 mg/m ³) TWA OSHA PEL: 1000 ppm (1900 mg/m ³) TWA ACGIH TLV: 1000ppm (1900mg/m ³) TWA <i>Isopropanol:</i> NIOSH REL: TWA 400 ppm (980 mg/m ³) ST 500 ppm (1225 mg/m ³) OSHA PEL: TWA 400 ppm (980 mg/m ³) ACGIH TLV: TWA 200 ppm STEL 400 ppm
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. 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. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	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

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

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Strong oxidizers, silver salts, acid chlorides, alkali metals, metal hydrides, hydrazine.
10.6 Hazardous Decomposition Materials	Will not occur.

Section 11. Toxicological Information

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

Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.

Other Disposal Recommendations.	No relevant data available.
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Section 14. Transport Information

14.1 UN Number DOT, IATA,IMDG, ADR	DOT: 1170 ADR/RID: 1170 IMDG: 1170 IATA: 1170
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Ethanol Solutions IMDG: Ethanol Solutions IATA: Ethanol Solutions DOT: Ethanol Solutions
14.3 Transport Hazard Class(es)	DOT: Class 3 IATA: Class 3 IMDG: Class 3 ADR/RID: Class 3
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: II IMDG: II IATA: II DOT: II
14.5 Environmental Hazards	Marine Pollutant: No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	<u>Ethanol</u> Massachusetts Pennsylvania New jersey <u>Isopropanol</u> Massachusetts Pennsylvania New jersey
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R11 EN: Highly flammable. DA: Meget brandfarlig. DE: Leichtentzündlich. EL: Πολύ εύφλεκτο. ES: Fácilmente inflamable. FR: Facilement inflammable.

	<p>IT: Facilmente infiammabile. NL: Licht ontvlambaar. PT: Facilmente inflamável. SV: Mycket brandfarligt.</p> <p>R36 EN: Irritating to eyes. DE: Reizt die Augen. FR: Irritant pour les yeux. IT: Irritante per gli occhi. ES: Irrita los ojos. FR: Irritant pour les yeux. IT: Irritante per gli occhi. NL: Irriterend voor de ogen. PT: Irritante para os olhos. SV: Irriterar ögonen.</p>
<p>S phrases</p>	<p>S7 EN: Keep container tightly closed. DA: Emballagen skal holdes tæt lukket. DE: Behälter dicht geschlossen halten. EL: Το δοχείο να διατηρείται ερμητικά κλεισμένο. ES: Manténgase el recipiente bien cerrado. FR: Conserver le récipient bien fermé. IT: Conservare il recipiente ben chiuso. NL: In goed gesloten verpakking bewaren. PT: Manter o recipiente bem fechado. SV: Förpackningen förvaras väl tillsluten.</p> <p>S16 EN: Keep away from sources of ignition - No smoking. DA: Holdes væk fra antændelseskilder - Rygning forbudt. DE: Von Zündquellen fernhalten - Nicht rauchen. EL: Μακριά από πηγές ανάφλεξης - Απαγορεύεται το κάπνισμα. ES: Conservar alejado de toda llama o fuente de chispas - No fumar. FR: Conserver a l'ecart de toute flamme ou source d'étincelles - Ne pas fumer. IT: Conservare lontano da fiamme e scintille - Non fumare. NL: Verwijderd houden van ontstekingsbronnen - Niet roken. PT: Manter afastado de qualquer chama ou fonte de ignição - Não fumar. SV: Förvaras åtskilt från antändningskällor - Rökning förbjuden</p> <p>S24/25 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: Evítase 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. 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.</p> <p>S26 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.</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>
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Section 16. Other Information

Revision Date: 2019-01-11




Notice to Reader:


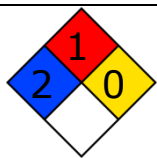
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Section 1. Identification

1.1 Product Identifier	Product Name: Hydroquinone Product Number: SSC1088	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification

2.1 GHS Classification	Acute toxicity, Oral (Category 4) – H302 Serious eye damage (Category 1) – H318 Germ cell mutagenicity (Category 2) – H341 Carcinogenicity (Category 2) – H351 Skin sensitisation (Category 1) – H317 Acute aquatic toxicity (Category 1) – H400 Chronic aquatic toxicity (Category 1) – H410		
Classification: Directive 1999/45/EC	 C EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande	 Xn EN: Harmful DA: Sundhedsskadelig DE: Gesundheitsschädlich EL: Επιβλαβές ES: Nocivo FR: Nocif IT: Nocivo NL: Schadelijk PT: Nocivo SV: Hälsoskadlig	 N: 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

	For full text of R- & S- phrases: see Section 15.	SV: Miljöfarlig'								
2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s) – Not listed on Label: H302 – Harmful if swallowed. H317 – May Cause an allergic skin reaction H318 – Causes serious eye damage H341 – Suspected of causing genetic defects. H351 – Suspected of causing cancer H410 – Very toxic to aquatic life with long lasting effects Precautionary statement(s) – Not listed on Label: P202 – Do not handle until all safety precautions [on SDS] have been read and understood. P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes. P310 – Immediately call a POISON CENTER/doctor. P280 – Wear protective gloves/eye protection/face protection. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.									
NFPA Scale: 0-4										
HMIS (U.S.A.) Scale: 0-4	<table border="1"> <tr> <td>HEALTH</td> <td>2</td> </tr> <tr> <td>FLAMMABILITY</td> <td>1</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>C</td> </tr> </table>	HEALTH	2	FLAMMABILITY	1	PHYSICAL HAZARD	0	PERSONAL PROTECTION	C	
HEALTH	2									
FLAMMABILITY	1									
PHYSICAL HAZARD	0									
PERSONAL PROTECTION	C									
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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: Hydroquinone (CAS# 123-31-9) 100%*, Raw powder material (Not a mixture)

*May contain additional non-hazardous proprietary ingredients.

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

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 and get immediate medical attention.

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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	Dust and air mixture can ignite or explode. Carbon oxides
5.3 Advice for firefighters	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

8.1 Control parameters	Exposure Limits: <i>Hydroquinone:</i> <i>NIOSH REL</i> : C 2 mg/m ³ [15-minute] <i>OSHA PEL</i> : TWA 2 mg/m ³
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection.

	<p>Safety glasses or goggles are required.</p> <p>Skin protection. Protective clothing is required.</p> <p>Hand protection. 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>Respiratory protection. Avoid breathing vapor.</p> <p>Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.</p>
Engineering Controls	<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

Physical State	Solid
Color	White crystal
Odor	Odorless
Odor Threshold	Unknown
pH	Unknown
Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	165°C (closed cup)
Evaporation Rate	Unknown
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	499°C
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

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

10.5 Incompatible Materials	Strong bases, strong oxidizing agents, sodium hydroxide.
10.6 Hazardous Decomposition Materials	Carbon oxides.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. No relevant data available Skin Corrosion/Irritation. Corrosive to skin and mucous membranes. Serious Eye Damage/Irritation. Corrosive to eye. Respiratory or skin sensitization. No relevant data available. Germ Cell Mutagenicity. This material is a suspected mutagen
Carcinogenicity.	International Agency for Research on Cancer (IARC). None of the components are listed. National Toxicology Program (NTP). None of the components are listed. Other: This material is a suspected carcinogen


Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA,IMDG, ADR	DOT: 3077 ADR/RID: 3077 IMDG: 3077 IATA: 3077
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: IMDG: IATA: DOT:
14.3 Transport Hazard Class(es)	DOT: 9 IATA: 9 IMDG: 9 ADR/RID:9 
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III
14.5 Environmental Hazards	Marine Pollutant: No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	None of the components in this mixture are listed.
Other Regulations	<i>Hydroquinone</i> SARA 302 SARA 313
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R22 EN: Harmful if swallowed. DA: Farlig ved indtagelse. DE: Gesundheitsschädlich beim Verschlucken. EL: Επιβλαβές σε περίπτωση καταπόσεως. ES: Nocivo por ingestión. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. NL: Schadelijk bij opname door de mond. PT: Nocivo por ingestão. SV: Farligt vid förtäring.

	<p>R40 EN: Limited evidence of a carcinogenic effect. DA: Mulighed for kræftfremkaldende effekt. DE: Verdacht auf krebserzeugende Wirkung. EL: Ύποπτο 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> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskadet. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p> <p>R43 EN: May cause sensitisation by skin contact. DA: Kan give overfølsomhed ved kontakt med huden. DE: Sensibilisierung durch Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση σε επαφή με το δέρμα. ES: Posibilidad de sensibilización en contacto con la piel. FR: Peut entraîner une sensibilisation par contact avec la peau. IT: Può provocare sensibilizzazione per contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij contact met de huid. PT: Pode causar sensibilização em contacto com a pele. SV: Kan ge allergi vid hudkontakt.</p> <p>R50 EN: Very toxic to aquatic organisms. DA: Meget giftig for organismer, der lever i vand. DE: Sehr giftig für Wasserorganismen. EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς. ES: Muy tóxico para los organismos acuáticos. FR: Très toxique pour les organismes aquatiques. IT: Altamente tossico per gli organismi acquatici. NL: Zeer vergiftig voor in het water levende organismen. PT: Muito tóxico para os organismos aquáticos. SV: Mycket giftigt för vattenlevande organismer.</p> <p>R68 EN: Possible risk of irreversible effects. DA: Mulighed for varig skade på helbred. DE: Irreversibler Schaden möglich. EL: Πιθανοί κίνδυνοι μονίμων επιδράσεων. ES: Posibilidad de efectos irreversibles. FR: Possibilité d'effets irréversibles. IT: Possibilità di effetti irreversibili. NL: Onherstelbare effecten zijn niet uitgesloten. PT: Possibilidade de efeitos irreversíveis. SV: Möjlig risk för bestående hälsoskador.</p>
<p>S phrases</p>	<p>S26 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.</p>

	<p>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>S36/37/39</p> <p>EN: Wear suitable protective clothing, gloves and eye/face protection.</p> <p>DA: Brug særligt arbejdstøj, egnede beskyttelseshandsker og -briller/ansigtsskærm.</p> <p>DE: Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen.</p> <p>EL: Φοράτε κατάλληλη προστατευτική ενδυμασία, γάντια και συσκευή προστασίας ματιών/προσώπου</p> <p>ES: Usense indumentaria y guantes adecuados y protección para los ojos/la cara.</p> <p>FR: Porter un vêtement de protection approprié, des gants et un appareil de protection des yeux/du visage.</p> <p>IT: Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia.</p> <p>NL: Draag geschikte beschermende kleding, handschoenen en een beschermingsmiddel voor de ogen/het gezicht.</p> <p>PT: Usar vestuário de protecção, luvas e equipamento protector para os olhos /face adequados.</p> <p>SV: Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p> <p>S61</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: Evítese su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.</p> <p>FR: Éviter 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

Revision Date: 2019-01-11


Notice to Reader:




To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Section 1. Identification

1.1 Product Identifier	Product Name: Oxidizer Solution, Steiner Product Number: SSC1278	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification














2.1 GHS Classification	Skin corrosion (Category 1B) – H314 Serious eye damage (Category 1) – H318 Flammable liquids (Category 2) – H225 Specific target organ toxicity (Category 3), Central nervous system – H336	
Classification: Directive 1999/45/EC		F R11, R34, R41, R67; S7, S9, S16, S23, S24/25, S26, S28, S36/37/39, S45 EN: Highly flammable DA: Meget brandfarlig DE: Leichtentzündlich EL: Πολύ εύφλεκτο ES: Fácilmente inflamable FR: Facilement inflammable IT: Facilmente infiammabile NL: Licht ontvlambaar PT: Facilmente inflamável SV: Mycket brandfarligt



	 <p>C EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande</p> <p>For full text of R- & S- phrases: see Section 15.</p>								
2.2 Label Elements	<p>Pictogram(s):</p>  <p>Signal word: Danger</p> <p>Hazard statement(s): H225 – Highly flammable liquid and vapour H314 – Causes severe skin burns and eye damage H336 – May cause drowsiness or dizziness</p> <p>Precautionary statement(s): P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.</p>								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<table border="1"> <tr> <td>HEALTH</td> <td>2</td> </tr> <tr> <td>FLAMMABILITY</td> <td>3</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>G</td> </tr> </table>	HEALTH	2	FLAMMABILITY	3	PHYSICAL HAZARD	0	PERSONAL PROTECTION	G
HEALTH	2								
FLAMMABILITY	3								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	G								
2.3 Other Hazards	<p>PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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	%
Ethyl Alcohol	64-17-5	200-578-6	 Danger. 2 H225 Highly flammable liquid and vapour.	≤ 62
Phenol	108-95-2	203-632-7	 Danger. 3 H311 Toxic in contact with skin. 3 H331 Toxic if inhaled.  Warning. 2 H341 Suspected of causing genetic defects. STOT RE, 2 H371 May cause damage to organs. 2.H373 Causes damage to organs through prolonged or repeated exposure.  Danger. H314 Causes severe skin burns and eye damage.  Warning. 4 H302 Harmful if swallowed.  Warning. H402 Harmful to aquatic life.	≤ 5
Isopropyl Alcohol	67-63-0	200-661-7	 Warning. 2. H319 Causes serious eye irritation. 3. H336 May cause drowsiness or dizziness.  Danger. 3 H225 Highly flammable liquid and vapour.	≤ 3
Hydrochloric Acid	7647-01-0	231-595-7	 Warning. 3. H335 May cause respiratory irritation.  Danger. 1B. H314 Causes severe skin burns and eye damage.	≤ 1
Formic Acid	64-18-6	200-579-1	 Warning. 3 H226 Flammable liquid and vapour.  Warning. 4 H302 Harmful if swallowed.  Danger. 1A. H314 Causes severe skin burns and eye damage.	≤ 1

			 Danger. 3 H331 Toxic if inhaled.  Warning. H402 Harmful to aquatic life.	
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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 and get immediate medical attention.

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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	None known
5.3 Advice for firefighters	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

8.1 Control parameters	<p>Exposure Limits: <i>Ethanol:</i> NIOSH REL: 1000 ppm (1900 mg/m³) TWA OSHA PEL: 1000 ppm (1900 mg/m³) TWA ACGIH TLV: 1000ppm (1900mg/m³) TWA <i>Hydrochloric Acid:</i> NIOSH REL : C 5 ppm (7 mg/m³) OSHA PEL : C 5 ppm (7 mg/m³) <i>Isopropanol:</i> NIOSH REL: TWA 400 ppm (980 mg/m³) ST 500 ppm (1225 mg/m³) OSHA PEL: TWA 400 ppm (980 mg/m³) ACGIH TLV: TWA 200 ppm STEL 400 ppm <i>Phenol:</i> NIOSH REL : TWA 5 ppm (19 mg/m³) C 15.6 ppm (60 mg/m³) [15-minute] [skin] OSHA PEL : TWA 5 ppm (19 mg/m³) [skin]</p>
8.2 Exposure controls	<p>Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. 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. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.</p>
Engineering Controls	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

Physical State	Liquid
Color	Clear colorless

Odor	Alcohol odor
Odor Threshold	Unknown
pH	Acidic
Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	Unknown
Evaporation Rate	Unknown
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Strong oxidizing agents.
10.6 Hazardous Decomposition Materials	Carbon monoxide, carbon dioxide.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. No relevant data available Skin Corrosion/Irritation. Corrosive to skin and mucous membranes. Serious Eye Damage/Irritation. Corrosive to eye. Respiratory or skin sensitization. No relevant data available. Germ Cell Mutagenicity. No relevant data available.
Carcinogenicity.	International Agency for Research on Cancer (IARC). Hydrochloric Acid is listed as Group 3 – Not classifiable as to carcinogenicity in humans Isopropyl Alcohol is listed as Group 3 – not Classifiable as to carcinogenicity in humans

	National Toxicology Program (NTP). None of the components are listed.
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Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA,IMDG, ADR	DOT: 1170 ADR/RID: 1170 IMDG: 1170 IATA: 1170
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Ethanol IMDG: Ethanol IATA: Ethanol DOT: Ethanol
14.3 Transport Hazard Class(es)	DOT: 3 IATA: 3 IMDG: 3 ADR/RID:3 
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III

14.5 Environmental Hazards	Marine Pollutant: No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	<p>Ethanol Massachusetts Pennsylvania New Jersey</p> <p>Phenol Massachusetts Pennsylvania New Jersey</p> <p>Isopropyl Alcohol Massachusetts Pennsylvania New Jersey</p> <p>Hydrochloric Acid Massachusetts Pennsylvania New Jersey</p> <p>Formic Acid Massachusetts Pennsylvania New Jersey</p>
Other Regulations	<p>SARA 313 Isopropyl Alcohol Phenol Formic Acid</p>
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	<p>R11 EN: Highly flammable. DA: Meget brandfarlig. DE: Leichtentzündlich. EL: Πολύ εύφλεκτο. ES: Fácilmente inflamable. FR: Facilement inflammable. IT: Facilmente infiammabile. NL: Licht ontvlambaar. PT: Facilmente inflamável. SV: Mycket brandfarligt.</p> <p>R34 EN: Causes burns. DA: Ætsningsfare. DE: Verursacht Verätzungen. EL: Προκαλεί εγκαύματα. ES: Provoca quemaduras.</p>

	<p>FR: Provoque des brulures. IT: Provoca ustioni. NL: Veroorzaakt brandwonden. PT: Provoca queimaduras. SV: Frätande.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjensskade. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p> <p>R67 EN: Vapours may cause drowsiness and dizziness. DA: Dampe kan give sløvhed og svimmelhed. DE: Dämpfe können Schläfrigkeit und Benommenheit verursachen. EL: Η εισπνοή ατμών μπορεί να προκαλέσει υπνηλία και ζάλη. ES: La inhalación de vapores puede provocar somnolencia y vértigo. FR: L'inhalation de vapeurs peut provoquer somnolence et vertiges. IT: L'inalazione dei vapori può provocare sonnolenza e vertigini. NL: Dampen kunnen slaperigheid en duizeligheid veroorzaken. PT: Pode provocar sonolência e vertigens, por inalação dos vapores. SV: Ångor kan göra att man blir dåsig och omtöcknad.</p>
<p>S phrases</p>	<p>S7 EN: Keep container tightly closed. DA: Emballagen skal holdes tæt lukket. DE: Behälter dicht geschlossen halten. EL: Το δοχείο να διατηρείται ερμητικά κλεισμένο. ES: Manténgase el recipiente bien cerrado. FR: Conserver le récipient bien fermé. IT: Conservare il recipiente ben chiuso. NL: In goed gesloten verpakking bewaren. PT: Manter o recipiente bem fechado. SV: Förpackningen förvaras väl tillsluten.</p> <p>S9 EN: Keep container in a well-ventilated place. DA: Emballagen skal opbevares på et godt ventileret sted. DE: Behälter an einem gut gelüfteten Ort aufbewahren. EL: Το δοχείο να διατηρείται σε καλά αεριζόμενο μέρος. ES: Consérvese el recipiente en lugar bien ventilado. FR: Conserver le récipient dans un endroit bien ventilé. IT: Conservare il recipiente in luogo ben ventilato. NL: Op een goed geventileerde plaats bewaren. PT: Manter o recipiente num local bem ventilado. SV: Förpackningen förvaras på väl ventilerad plats.</p> <p>S16 EN: Keep away from sources of ignition - No smoking. DA: Holdes væk fra antændelseskilder - Rygning forbudt. DE: Von Zündquellen fernhalten - Nicht rauchen. EL: Μακριά από πηγές ανάφλεξης - Απαγορεύεται το κάπνισμα. ES: Conservar alejado de toda llama o fuente de chispas - No fumar. FR: Conserver a l'ecart de toute flamme ou source d'étincelles - Ne pas fumer. IT: Conservare lontano da fiamme e scintille - Non fumare. NL: Verwijderd houden van ontstekingsbronnen - Niet roken. PT: Manter afastado de qualquer chama ou fonte de ignição - Não fumar. SV: Förvaras åtskilt från antändningskällor - Rökning förbjuden.</p>

	<p>S23 EN: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). DA: Undgå indånding af gas/røg/dampe/aerosol-tåger (den eller de pågældende betegnelser angives af fabrikanten). DE: Gas/Rauch/Dampf/Aerosol nicht einatmen (geeignete Bezeichnung(en) vom Hersteller anzugeben). EL: Μην αναπνέετε αέρια/αναθυμιάσεις/ατμούς/εκνεφώματα (η κατάλληλη διατύπωση καθορίζεται από τον παραγωγό). ES: No respirar los gases/humos/vapores/aerosoles (denominación(es) adecuada(s) a especificar por el fabricante). FR: Ne pas respirer les gaz/fumées/vapeurs/aérosols (terme(s) approprié(s) à indiquer par le fabricant). IT: Non respirare i gas/fumi/vapori/aerosoli (termine(i) appropriato(i) da precisare da parte del produttore). NL: Gas/rook/damp/spuitnevel niet inademen. (toepasselijke term(en) aan te geven door de fabrikant). PT: Não respirar os gases/vapores/fumos/aerossóis (termo(s) apropriado(s) a indicar pelo produtor). SV: Undvik inandning av gas/rök/ånga/dimma (lämplig formulering anges av tillverkaren).</p> <p>S24/25 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. 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.</p> <p>S26 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>S28 EN: After contact with skin, wash immediately with plenty of water. DA: Kommer stof på huden vaskes straks med store mængder ... (angives af fabrikanten). DE: Bei Berührung mit der Haut sofort abwaschen mit viel ... (vom Hersteller anzugeben). EL: Σε περίπτωση επαφής με το δέρμα, πλυθείτε αμέσως με άφθονο ... (το είδος του υγρού καθορίζεται από τον παραγωγό). ES: En caso de contacto con la piel, lávese inmediata y abundantemente con ... (productos a especificar por el fabricante). FR: Après contact avec la peau, se laver immédiatement et abondamment avec ... (produits appropriés à indiquer par le fabricant). IT: In caso di contatto con la pelle lavarsi immediatamente ed abbondantemente con ... (prodotti idonei da indicarsi da parte del fabbricante).</p>
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	<p>NL: Na aanraking met de huid onmiddellijk wassen met veel ... (aan te geven door de fabrikant). PT: Após contacto com a pele, lavar imediata e abundantemente com ... (produtos adequados a indicar pelo produtor). SV: Vid kontakt med huden tvätta genast med mycket ... (anges av tillverkaren).</p> <p>S36/37/39 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 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>S45 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). PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo). SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p>
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Section 16. Other Information

Revision Date: 2019-01-11




Notice to Reader:



To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Section 1. Identification

1.1 Product Identifier	Product Name: Steiner Sensitizer (Zinc Formalin) Solution Product Number: SSC1137	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification

2.1 GHS Classification	Flammable liquids (Category 4) – H227 Acute Toxicity, Oral (Category 3) – H301 Acute Toxicity, Dermal (Category 4) – H311 Skin irritation (Category 2) – H315 Serious eye damage (Category 1) H318 Skin sensitization (Category 1) – H317 Carcinogenicity (Category 2) – H351 Specific target organ toxicity (Category 1) – H370		
Classification: Directive 1999/45/EC	 T EN: Toxic DA: Giftig DE: Giftig EL: Τοξικό ES: Tóxico FR: Toxique IT: Tossico NL: Vergiftig PT: Tóxico SV: Giftig	 C EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande	 Xn EN: Harmful DA: Sundhedsskadelig DE: Gesundheitsschädlich EL: Επιβλαβές ES: Nocivo FR: Nocif IT: Nocivo NL: Schadelijk PT: Nocivo SV: Hälsoskadlig











	R22, R23/24/25, R38, R40, R41, R43; S7, S16, S23, S26, S36/37/39 S51 S45, S60, S61 For full text of R- & S- phrases: see Section 15.		
2.2 Label Elements	Pictogram(s): 		
	Signal word:	Danger	
	Hazard statement(s):	H301 – Toxic if swallowed H311 – Toxic in contact with skin H318 – Causes serious eye damage H351 – Suspected of causing cancer H370 – Causes damage to organs	
	Hazard statement(s) not listed on label:	H317 – May Cause an allergic skin reaction H227 – Combustible Liquid H315 – Causes skin irritation	
	Precautionary statement(s):	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions [on SDS] have been read and understood. P308 + P315 – If exposed or concerned: Get immediate medical advice/attention.	
	Precautionary statement(s) not listed on label:	P301 + P315 - IF SWALLOWED: Get immediate medical advice/attention P280 – Wear protective gloves/protective clothing/eye protection/face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention. P403 + P235 – Store in a well-ventilated place. Keep container tightly closed.	
NFPA Scale: 0-4			
HMIS (U.S.A.) Scale: 0-4	HEALTH	3	
	FLAMMABILITY	1	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	H	
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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	%
Formalin (~37% Formaldehyde)	50-00-0	200-001-8	 Warning. 2 H315 Causes skin irritation.  Warning. 1. H400 Very toxic to aquatic life . 1. H410 Very toxic to aquatic life with long lasting effects.	≤ 10
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.	≤ 2.2
Sodium Acetate, Anhydrous	127-09-3	204-823-8	N/A	≤ 1
Methanol	67-56-1	200-659-6	 Danger. 3 H225 Highly flammable liquid and vapour.  Danger. 3. H301 Toxic if swallowed. 3 H311 Toxic in contact with skin. 3 H331 Toxic if inhaled.  Danger. 1 H370 Causes damage to organs.	≤ 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

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 and get immediate medical attention.

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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	Emits toxic vapors under fire conditions.
5.3 Advice for firefighters	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

8.1 Control parameters	<p>Exposure Limits: <i>Formaldehyde ;</i> NIOSH REL: Ca TWA 0.016 ppm C 0.1 ppm OSHA PEL: [1910.1048] TWA 0.75 ppm ST 2 ppm ACGIH TLV: 0.3 ppm C</p> <p><i>Methanol:</i> NIOSH REL: TWA 200 ppm (260 mg/m³) ST 250 ppm (325 mg/m³) [skin] OSHA PEL: TWA 200 ppm (260 mg/m³) ACGIH TLV: TWA 200 ppm (262 mg/m³) STEL 250 ppm (328 mg/m³)</p> <p><i>Acetic acid, glacial:</i> ACGIH TLV: 15ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA NIOSH REL: 15 ppm (37 mg/m3) STEL</p>
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	10 ppm (25 mg/m ³) TWA OSHA PEL: 10 ppm (25 mg/m ³) TWA
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. 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. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	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

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

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
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10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Strong oxidants, ammonia, chlorine bleach or hydrochloric acid. Mixing with phosphate solutions leads to precipitation of the zinc.
10.6 Hazardous Decomposition Materials	Carbon monoxide, carbon dioxide.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	<p>Acute Toxicity. Methanol: Oral LD50 LDLO Oral - Human - 143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. LD50 Oral - rat - 1,187 - 2,769 mg/kg Inhalation LC50 LC50 Inhalation - rat - 4 h - 128.2 mg/l LC50 Inhalation - rat - 6 h - 87.6 mg/l Dermal LD50 LD50 Dermal - rabbit - 17,100 mg/kg</p> <p>Skin Corrosion/Irritation. Irritating to skin and mucous membranes.</p> <p>Serious Eye Damage/Irritation. Causes serious eye damage.</p> <p>Respiratory or skin sensitization. No relevant data available.</p> <p>Germ Cell Mutagenicity. No relevant data available.</p>
Carcinogenicity.	<p>International Agency for Research on Cancer (IARC). None of the components are listed.</p> <p>National Toxicology Program (NTP). None of the components are listed.</p>


Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA, IMDG, ADR	DOT: 1198 ADR/RID: 1198 IMDG: 1198 IATA: 1198
14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR	ADR/RID: Formaldehyde, solutions, flammable IMDG: Formaldehyde, solutions, flammable IATA: Formaldehyde, solutions, flammable DOT: Formaldehyde, solutions, flammable
14.3 Transport Hazard Class(es)	DOT: 3 IATA: 3 IMDG: 3 ADR/RID: 3 
14.4 Packing Group DOT, IATA, IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III
14.5 Environmental Hazards	Marine Pollutant: No
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	Methanol is listed as a having developmental toxicity.
Right To Know Components	Formaldehyde Massachusetts Pennsylvania New Jersey

	<p>Zinc Chloride Massachusetts Pennsylvania New Jersey</p> <p>Sodium Acetate, Anhydrous Pennsylvania New Jersey</p> <p>Methanol Massachusetts Pennsylvania New Jersey</p> <p>Acetic Acid Massachusetts Pennsylvania New Jersey</p>
<p>15.2 Chemical Safety Assessment</p>	<p>No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.</p>
<p>R phrases</p>	<p>R22 EN: Harmful if swallowed. DA: Farlig ved indtagelse. DE: Gesundheitsschädlich beim Verschlucken. EL: Επιβλαβές σε περίπτωση καταπόσεως. ES: Nocivo por ingestión. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. NL: Schadelijk bij opname door de mond. PT: Nocivo por ingestão. SV: Farligt vid förtäring.</p> <p>R23/24/25 EN: Toxic by inhalation, in contact with skin and if swallowed. DA: Giftig ved indånding, ved hudkontakt og ved indtagelse. DE: Giftig beim Einatmen, Verschlucken und Berührung mit der Haut. EL: Τοξικό όταν εισπνέεται, σε επαφή με το δέρμα και σε περίπτωση καταπόσεως. ES: Tóxico por inhalación, por ingestión y en contacto con la piel. FR: Toxique par inhalation, par contact avec la peau et par ingestion. IT: Tossico per inalazione, contatto con la pelle e per ingestione. NL: Vergiftig bij inademing, opname door de mond en aanraking met de huid. PT: Tóxico por inalação, em contacto com a pele e por ingestão. SV: Giftigt vid inandning, hudkontakt och förtäring.</p> <p>R38 EN: Irritating to skin. DA: Irriterer huden. DE: Reizt die Haut. EL: Ερεθίζει το δέρμα. ES: Irrita la piel. FR: Irritant pour la peau. IT: Irritante per la pelle. NL: Irriterend voor de huid. PT: Irriterend voor de huid. SV: Irriterar huden.</p> <p>R40 EN: Limited evidence of a carcinogenic effect. DA: Mulighed for kræftfremkaldende effekt. DE: Verdacht auf krebserzeugende Wirkung. EL: Υποπτο καρκινογένεσης. ES: Posibles efectos cancerígenos. FR: Effet cancerogene suspecte ? preuves insuffisantes IT: Possibilità di effetti cancerogeni - prove insufficienti.</p>

	<p>NL: Carcinogene effecten zijn niet uitgesloten. PT: Possibilidade de efeitos cancerígenos. SV: Misstänks kunna ge cancer.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskade. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p> <p>R43 EN: May cause sensitisation by skin contact. DA: Kan give overfølsomhed ved kontakt med huden. DE: Sensibilisierung durch Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση σε επαφή με το δέρμα. ES: Posibilidad de sensibilización en contacto con la piel. FR: Peut entraîner une sensibilisation par contact avec la peau. IT: Può provocare sensibilizzazione per contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij contact met de huid. PT: Pode causar sensibilização em contacto com a pele. SV: Kan ge allergi vid hudkontakt.</p>
<p>S phrases</p>	<p>S7 EN: Keep container tightly closed. DA: Emballagen skal holdes tæt lukket. DE: Behälter dicht geschlossen halten. EL: Το δοχείο να διατηρείται ερμητικά κλεισμένο. ES: Manténgase el recipiente bien cerrado. FR: Conserver le récipient bien fermé. IT: Conservare il recipiente ben chiuso. NL: In goed gesloten verpakking bewaren. PT: Manter o recipiente bem fechado. SV: Förpackningen förvaras väl tillsluten.</p> <p>S16 EN: Keep away from sources of ignition - No smoking. DA: Holdes væk fra antændelseskilder - Rygning forbudt. DE: Von Zündquellen fernhalten - Nicht rauchen. EL: Μακριά από πηγές ανάφλεξης - Απαγορεύεται το κάπνισμα. ES: Conservar alejado de toda llama o fuente de chispas - No fumar. FR: Conserver a l'ecart de toute flamme ou source d'étincelles - Ne pas fumer. IT: Conservare lontano da fiamme e scintille - Non fumare. NL: Verwijderd houden van ontstekingsbronnen - Niet roken. PT: Manter afastado de qualquer chama ou fonte de ignição - Não fumar. SV: Förvaras åtskilt från antändningskällor - Rökning förbjuden.</p> <p>S23 EN: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). DA: Undgå indånding af gas/tøg/dampe/aerosol-tåger (den eller de pågældende betegnelser angives af fabrikanten). DE: Gas/Rauch/Dampf/Aerosol nicht einatmen (geeignete Bezeichnung(en) vom Hersteller anzugeben). EL: Μην αναπνέετε αέρια/αναθυμιάσεις/ατμούς/εκνεφώματα (η κατάλληλη διατύπωση καθορίζεται από τον παραγωγό). ES: No respirar los gases/humos/vapores/aerosoles (denominación(es) adecuada(s) a especificar por el fabricante).</p>

	<p>FR: Ne pas respirer les gaz/fumées/vapeurs/aérosols (terme(s) approprié(s) à indiquer par le fabricant).</p> <p>IT: Non respirare i gas/fumi/vapori/aerosoli (termine(i) appropriato(i) da precisare da parte del produttore).</p> <p>NL: Gas/rook/damp/spuitnevel niet inademen. (toepasselijke term(en) aan te geven door de fabrikant).</p> <p>PT: Não respirar os gases/vapores/fumos/aerossóis (termo(s) apropriado(s) a indicar pelo produtor).</p> <p>SV: Undvik inandning av gas/rök/ånga/dimma (lämplig formulering anges av tillverkaren).</p> <p>S26</p> <p>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 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>S36/37/39</p> <p>EN: Wear suitable protective clothing, gloves and eye/face protection.</p> <p>DA: Brug særligt arbejdstøj, egnede beskyttelseshandsker og -briller/ansigtsskærm.</p> <p>DE: Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen.</p> <p>EL: Φοράτε κατάλληλη προστατευτική ενδυμασία, γάντια και συσκευή προστασίας ματιών/προσώπου</p> <p>ES: Usense indumentaria y guantes adecuados y protección para los ojos/la cara.</p> <p>FR: Porter un vêtement de protection approprié, des gants et un appareil de protection des yeux/du visage.</p> <p>IT: Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia.</p> <p>NL: Draag geschikte beschermende kleding, handschoenen en een beschermingsmiddel voor de ogen/het gezicht.</p> <p>PT: Usar vestuário de protecção, luvas e equipamento protector para os olhos /face adequados.</p> <p>SV: Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p> <p>S45</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>S51</p>
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	<p>EN: Use only in well-ventilated areas. DA: Må kun bruges på steder med god ventilation. DE: Nur in gut gelüfteten Bereichen verwenden. EL: Να χρησιμοποιείται μόνο σε καλά αεριζόμενο χώρο. ES: Úselese únicamente en lugares bien ventilados. FR: Utiliser seulement dans des zones bien ventilées. IT: Usare soltanto in luogo ben ventilato. NL: Uitsluitend op goed geventileerde plaatsen gebruiken. PT: Utilizar somente em locais bem ventilados. SV: Sörj för god ventilation.</p> <p>S60 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: Eliminer 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>S61 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: Eviter 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

Revision Date: 2019-01-11


Notice to Reader:




To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Section 1. Identification

1.1 Product Identifier	Product Name: Silver Nitrate Solution (1%) Product Number: SSC1120	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification

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





	 <p>N: 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- & S- phrases: see Section 15.</p>								
2.2 Label Elements	<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>								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<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								
2.3 Other Hazards	<p>PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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.	≤ 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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	None known
5.3 Advice for firefighters	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

8.1 Control parameters	Exposure Limits: N/A
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. 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. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	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

Physical State	Liquid
Color	Transparent, colorless
Odor	Unknown
Odor Threshold	Unknown
pH	Unknown

Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	Unknown
Evaporation Rate	Unknown
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

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

Section 11. Toxicological Information

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

Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA, IMDG, ADR	DOT: 3082 ADR/RID: 3082 IMDG: 3082 IATA: 3082
14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR	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)
14.3 Transport Hazard Class(es)	DOT: 9 IATA: 9 IMDG: 9 ADR/RID: 9
14.4 Packing Group DOT, IATA, IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III
14.5 Environmental Hazards	Marine Pollutant: Yes
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	None of the components in this mixture are listed.
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	<p>R36/38 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>R50/53 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>
S phrases	<p>S26 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>S45 EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where</p>

	<p>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 επικότα 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>S60</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>S61</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: Evítese su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.</p> <p>FR: Éviter 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

Revision Date: 2019-01-11


Notice to Reader:



To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Section 1. Identification

1.1 Product Identifier	Product Name: Silver Nitrate Solution (0.2%) Product Number: SSC1187	
1.2 Intended use	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.	
1.3 Details of the supplier of the safety data sheet	Manufacturer	Cancer Diagnostics, Inc.
	Address	116 Page Point Circle Durham, NC 27703
	Phone Number	1-877-846-5393
	Fax Number	1-877-817-1716
	e-mail	compliance@cancerdiagnostics.com
	Website	www.cancerdiagnostics.com

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Acute aquatic toxicity (Category 1) – H400 Chronic aquatic toxicity (Category 2) – H411
Classification: OSHA 29 CFR 1910.1200 HCS	Acute aquatic toxicity (Category 1) – H400 Chronic aquatic toxicity (Category 2) – H411
Classification: Directive 1999/45/EC	 <p>N: R50/53, S60, S61 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' For full text of R- & S- phrases: see Section 15.</p>





2.2 Label Elements	Pictogram(s):  Signal word: Warning Hazard statement(s): H410 – Very toxic to aquatic life with long lasting effects Precautionary statement(s): P273 – Avoid release to the environment		
NFPA Scale: 0-4			
HMIS (U.S.A.) Scale: 0-4	HEALTH	1	
	FLAMMABILITY	0	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	B	
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: 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	%
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.	≤ 0.2

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 and get immediate medical attention.

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

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	No unusual fire or explosion hazards expected.
5.3 Advice for firefighters	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

8.1 Control parameters	Exposure Limits: N/A
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. 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. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	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

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

Section 10. Stability and Reactivity

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

Section 11. Toxicological Information

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

Section 12. Ecological Information

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

Section 13. Disposal Considerations

13.1 Waste Disposal Methods.	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.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information

14.1 UN Number DOT, IATA,IMDG, ADR	DOT: 3082 ADR/RID: 3082 IMDG: 3082 IATA: 3082
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	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)
14.3 Transport Hazard Class(es)	DOT: 9 IATA: 9 IMDG: 9 ADR/RID: 9
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III
14.5 Environmental Hazards	Marine Pollutant: Yes
14.6 Special Precautions for User	Not applicable.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	<u>Silver nitrate</u> Pennsylvania
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R50/53 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 acuático. SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.
S phrases	<p>S60 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: Eliminer 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>S61 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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