

Sodium Thiosulfate Solution 5%


1. Identification

1.1 Product Identifier	Product Name: Sodium Thiosulfate Solution (5%) Product Number: SSC1131	
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

2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Not a hazardous mixture as classified by Regulation (EC) No 1272/2008 (CLP)
Classification: OSHA 29 CFR 1910.1200 HCS	Not a hazardous mixture as classified by OSHA 29 CFR 1910.1200 HCS (GHS)
Classification: Directive 1999/45/EC	Not a hazardous mixture as classified by Directive 1999/45/EC For full text of R- & S- phrases: see Section 15.

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2.2 Label Elements	Pictogram: Not a hazardous mixture Signal word: Not a hazardous mixture. Hazard Statement(s): Not a hazardous mixture Precautionary Statements(s): Not a hazardous mixture			
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.			

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	%
Sodium Thiosulfate	7772-98-7	231-867-5	N/A	≤5

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 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

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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.)

6. Accidental Release Measures

<p>6.1 Personal precautions, protective equipment and emergency procedures Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.</p> <p>6.2 Environmental precautions Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.</p> <p>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.</p>

7. Handling and Storage

<p>7.1 Precautions for safe handling. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor.</p> <p>7.2 Conditions for safe storage, including any incompatibilities. Store in well ventilated area. Keep container tightly closed. Store at 15-30°C.</p> <p>7.3 Specific end use(s). See section 1.2</p>

8. Exposure Controls / Personal Protection

8.1 Control parameters	Exposure Limits: N/A
8.2 Exposure controls	<p>Personal Protective Equipment (PPE):</p> <p>Eye/Face protection. 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. 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.

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9. Physical and Chemical Properties

Physical State	Liquid
Color	Colorless
Odor	Odorless
Odor Threshold	Unknown
pH	Neutral
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

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	Sodium nitrate, oxidizing agents, acids, alkalis.
10.6 Hazardous Decomposition Materials	Sodium oxide, Hydrogen sulfide.

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.
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	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.

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.

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.

14. Transport Information

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

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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	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.
S phrases	S2 EN: Keep out of the reach of children. DA: Opbevares utilgængeligt for børn. DE: Darf nicht in die Hände von Kindern gelangen. EL: Μακριά από παιδιά. ES: Manténgase fuera del alcance de los niños. FR: Conserver hors de la portee des enfants. IT: Conservare fuori della portata dei bambini. NL: Buiten bereik van kinderen bewaren. PT: Manter fora do alcance das crianças. SV: Förvaras oåtkomligt för barn. 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.

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: Sodium Bisulfite Solution Product Number: SSC1185-0.1	
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/sds

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Not a hazardous mixture as classified by Regulation (EC) No 1272/2008 (CLP)
Classification: OSHA 29 CFR 1910.1200 HCS	Not a hazardous mixture as classified by OSHA 29 CFR 1910.1200 HCS (GHS)
Classification: Directive 1999/45/EC	Not a hazardous mixture as classified by Directive 1999/45/EC For full text of R- & S- phrases: see Section 15.


2.2 Label Elements	Pictogram: Not a hazardous mixture Signal word: Not a hazardous mixture Hazard Statement(s): Not a hazardous mixture Precautionary Statements(s): Not a hazardous mixture			
NFPA Scale: 0-4				
HMIS (U.S.A.) Scale: 0-4	HEALTH	0		
	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	%
Sodium Bisulfite	7631-90-5	231-548-0	 Warning. 4 H302 Harmful if swallowed.	≤ 0.1

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get medical attention if symptoms persist.

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 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	Sodium oxides, Sulphur 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

<p>6.1 Personal precautions, protective equipment and emergency procedures Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.</p> <p>6.2 Environmental precautions Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.</p> <p>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.</p>

Section 7. Handling and Storage

<p>7.1 Precautions for safe handling. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor.</p> <p>7.2 Conditions for safe storage, including any incompatibilities. Store in well ventilated area. Keep container tightly closed. Store at 15-30°C.</p> <p>7.3 Specific end use(s). See section 1.2</p>

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	<p>Exposure Limits: Sodium Bisulfite: TWA 5 mg/m³ (TLV)</p>
8.2 Exposure controls	<p>Personal Protective Equipment (PPE):</p> <p>Eye/Face protection. 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.</p>

	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.
Odor	Slight 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.
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 acids and oxidizing agents.
10.6 Hazardous Decomposition Materials	None known

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. Sodium Bisulfite: Rat LD ₅₀ 2000mg/kg Skin Corrosion/Irritation.
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	May be irritating to skin and mucous membranes. Serious Eye Damage/Irritation. May be 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: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
14.3 Transport Hazard Class(es)	DOT: Not dangerous goods. IATA: Not dangerous goods. IMDG: Not dangerous goods.

	ADR/RID: Not dangerous goods.
14.4 Packing Group DOT, IATA, IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
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.
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	
S phrases	<p>S25 EN: Avoid contact with eyes. DA: Undgå kontakt med øjnene. DE: Berührung mit den Augen vermeiden. EL: Αποφεύγετε την επαφή με τα μάτια. ES: Evítese el contacto con los ojos. FR: Éviter le contact avec les yeux. IT: Evitare il contatto con gli occhi. PT: Evitar o contacto com os olhos. SV: Undvik kontakt med ögonen.</p> <p>S46 EN: If swallowed, seek medical advice immediately and show this container or label. DA: Ved indtagelse, kontakt odümgående læge og vis denne beholder eller etiket. DE: Bei Verschlucken sofort ärztlichen Rat einholen und Verpackung odor Etikett vorzeigen. EL: Σε περίπτωση κατάποσης ζητήστε αμέσως ιατρική συμβουλή και δείξτε αυτό το δοχείο ή την ετικέτα. ES: En caso de ingestión, acúdase inmediatamente al medico y muéstresele la etiqueta o el envase. FR: En cas d'ingestion, consulter immédiatement un médecin et lui montrer l'emballage ou l'étiquette. IT: In caso d'ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta. NL: In geval van inslikken onmiddellijk een arts raadplegen en verpakking of etiket tonen. PT: Em caso de ingestão, consultar imediatamente o médico e mostrar-lhe a embalagem ou o rótulo. SV: Vid förtäring kontakta genast läkare och visa denna förpackning eller etiketten.</p>

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-VO	
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	<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	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

	<p>ambiente acuático. SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.</p>
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>

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: Methenamine Solution Product Number: SSC1248	
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/sds

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Skin sensitization (Category 1) – H317
Classification: OSHA 29 CFR 1910.1200 HCS	Skin sensitization (Category 1) – H317
Classification: Directive 1999/45/EC	R43, S24 EN: May cause sensitization by inhalation and skin contact. DA: Kan give overfølsomhed ved indånding og ved kontakt med huden. DE: Sensibilisierung durch Einatmen und Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση όταν εισπνέεται και σε επαφή με το δέρμα. ES: Posibilidad de sensibilización por inhalación y por contacto con la piel. FR: Peut entraîner une sensibilisation par inhalation et par contact avec la peau. IT: Può provocare sensibilizzazione per inalazione e contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij inademing of contact met de huid. PT: Pode causar sensibilização por inalação e em contacto com a pele. SV: Kan ge allergi vid inandning och hudkontakt. For full text of R- & S- phrases: see Section 15. SV: Hälsoskadlig For full text of R- & S- phrases: see Section 15.



2.2 Label Elements	Pictogram(s):  Signal word: Warning Hazard statement(s): H317 – May cause an allergic skin reaction 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.		
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	%
Methenamine (Hexamethylenetetramine)	100-97-0	202-905-8	 Warning. 2 H228 Flammable solid.  Danger. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. DGR 1 H317 May cause an allergic skin reaction.	≤ 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	Carbon oxides, nitrogen oxides (NOx), formaldehyde-like, Ammonia, Hydrogen cyanide (hydrocyanic acid)
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	Strong acids, Acids, Strong oxidizing agents., Alkalis, Bromides, Chlorides, Iodine
10.6 Hazardous Decomposition Materials	Carbon oxides.

Section 11. Toxicological Information

11.1 Information on	Acute Toxicity.
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Toxicological Effects.	Hexamethylenetetramine LD ₅₀ Rat 20,000 mg/kg (oral) Skin Corrosion/Irritation. Irritating to skin and mucous membranes. Serious Eye Damage/Irritation. Irritating to eye. Respiratory or skin sensitization. May cause allergic skin reaction. Germ Cell Mutagenicity. Laboratory experiments have shown mutagenic effects.
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	Hexamethylenetetramine 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: Not dangerous goods ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods
14.3 Transport Hazard Class(es)	DOT: Not dangerous goods IATA: Not dangerous goods

	IMDG: Not dangerous goods ADR/RID: Not dangerous goods
14.4 Packing Group DOT, IATA, IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods
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	Hexamethylenetetramine (Methenamine) CAS#:100-97-0 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	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.
S phrases	S24 EN: Avoid contact with skin. DA: Undgå kontakt med huden. DE: Berührung mit der Haut vermeiden. EL: Αποφεύγετε την επαφή με το δέρμα. ES: Evítese el contacto con la piel. FR: Éviter le contact avec la peau. IT: Evitare il contatto con la pelle. NL: Aanraking met de huid vermijden. PT: Evitar o contacto com a pele. SV: Undvik kontakt med huden.

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: Light Green Solution Product Number: SSC1093	
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/sds

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H320	
Classification: OSHA 29 CFR 1910.1200 HCS	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H320	
Classification: Directive 1999/45/EC		Xi R36/38, S26 EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande For full text of R- & S- phrases: see Section 15.



2.2 Label Elements	Pictogram(s):  Signal word: Warning Hazard statement(s): H315 – Causes skin irritation H320 – Causes eye irritation Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.		
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	%
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.	<0.05

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 develops.

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 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: Acetic acid, glacial; ACGIH TLV: 15ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA NIOSH REL: 15 ppm (37 mg/m3) STEL 10 ppm (25 mg/m3) TWA OSHA PEL: 10 ppm (25 mg/m3) TWA
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8.2 Exposure controls	<p>Personal Protective Equipment (PPE):</p> <p>Eye/Face protection. 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	Liquid
Color	Green/Blue
Odor	Odorless
Odor Threshold	Unknown
pH	Moderately 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 acids, strong oxidizers
10.6 Hazardous Decomposition Materials	None known.

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 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: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
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14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
14.3 Transport Hazard Class(es)	DOT: Not dangerous goods. IATA: Not dangerous goods. IMDG: Not dangerous goods. ADR/RID: Not dangerous goods.
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
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.
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	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.
S phrases	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



Safety Data Sheet

Emergency 1-800-424-9300
Contact (intl.) 1-352-323-3500

	<p>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: Gold Chloride Solution (0.2%) Product Number: SSC1080	
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/sds

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	Skin sensitization (Category 1) – H317
Classification: OSHA 29 CFR 1910.1200 HCS	Skin sensitization (Category 1) – H317
Classification: Directive 1999/45/EC	R42/43, S26, S36/37/39, S45 EN: May cause sensitization by inhalation and skin contact. DA: Kan give overfølsomhed ved indånding og ved kontakt med huden. DE: Sensibilisierung durch Einatmen und Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση όταν εισπνέεται και σε επαφή με το δέρμα. ES: Posibilidad de sensibilización por inhalación y por contacto con la piel. FR: Peut entraîner une sensibilisation par inhalation et par contact avec la peau. IT: Può provocare sensibilizzazione per inalazione e contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij inademing of contact met de huid. PT: Pode causar sensibilização por inalação e em contacto com a pele. SV: Kan ge allergi vid inandning och hudkontakt. For full text of R- & S- phrases: see Section 15.

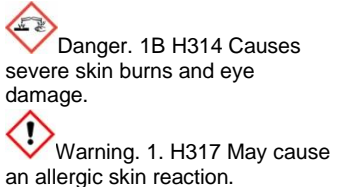
2.2 Label Elements	Pictogram(s):  Signal word: Warning Hazard statement(s): H317 – May cause an allergic skin reaction Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.		
NFPA Scale: 0-4			
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	%
Gold Chloride	16961-25-4	240-948-4		≤ 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. Get immediate 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	Decomposes on heating to chlorine gas, hydrogen chloride and metallic gold.
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 yellow
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	Ammonia or ammonia salts. Strong bases.
10.6 Hazardous Decomposition Materials	Hydrogen chloride.

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.

Section 14. Transport Information

14.1 UN Number DOT, IATA, IMDG, ADR	DOT: Not dangerous goods ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods

14.3 Transport Hazard Class(es)	DOT: Not dangerous goods IATA: Not dangerous goods IMDG: Not dangerous goods ADR/RID: Not dangerous goods
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods DOT: Not dangerous goods
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.
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R42/43 EN: May cause sensitization by inhalation and skin contact. DA: Kan give overfølsomhed ved indånding og ved kontakt med huden. DE: Sensibilisierung durch Einatmen und Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση όταν εισπνέεται και σε επαφή με το δέρμα. ES: Posibilidad de sensibilización por inhalación y por contacto con la piel. FR: Peut entraîner une sensibilisation par inhalation et par contact avec la peau. IT: Può provocare sensibilizzazione per inalazione e contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij inademing of contact met de huid. PT: Pode causar sensibilização por inalação e em contacto com a pele. SV: Kan ge allergi vid inandning och hudkontakt.
S phrases	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>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 επκέτα 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: Chromic Acid Solution 10% Product Number: SSC1156	
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/sds

Section 2. Hazards Identification

2.1 Classification: Regulation (EC) No 1272/2008 (CLP)	May cause allergy or asthma symptoms (Category 1) – H334 May cause genetic defects (Category 1B) – H340 May cause cancer (Category 1A) – H350 Suspected of damaging fertility (Category 2) – H361 May cause damage to organs through prolonged or repeated exposure (Category 2) – H373 Causes serious eye damage (Category 1) – H318 Harmful if swallowed (Category 4) – H302 Harmful if inhaled (Category 4) – H332 Causes skin irritation (Category 2), H315 May cause an allergic skin reaction (Category 1) – H317
Classification: OSHA 29 CFR 1910.1200 HCS	May cause allergy or asthma symptoms (Category 1) – H334 May cause genetic defects (Category 1B) – H340 May cause cancer (Category 1A) – H350 Suspected of damaging fertility (Category 2) – H361 May cause damage to organs through prolonged or repeated exposure (Category 2) – H373 Causes serious eye damage (Category 1) – H318 Harmful if swallowed (Category 4) – H302 Harmful if inhaled (Category 4) – H332 Causes skin irritation (Category 2), H315 May cause an allergic skin reaction (Category 1) – H317

Classification:
Directive 1999/45/EC



Xn, R35, R42/43
EN: Harmful
DA: Sundhedsskadelig
DE: Gesundheitsschädlich
EL: Επιβλαβές
ES: Nocivo
FR: Nocif
IT: Nocivo
NL: Schadelijk
PT: Nocivo
SV: Hälsoskadlig





T, R45, R46, R24/25, R26, R48/23, R62
EN: Toxic
DA: Giftig
DE: Giftig
EL: Τοξικό
ES: Tóxico
FR: Toxique
IT: Tossico
NL: Vergiftig
PT: Tóxico
SV: Giftig




N, R50/53
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



O:
EN: Oxidizing
DA: Brandnærende
DE: Brandfördernd
EL: Οξειδωτικό
ES: Comburente
FR: Comburant
IT: Comburente
NL: Oxyderend
PT: Comburente
SV: Oxiderande

	 <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>
<p>2.2 Label Elements</p>	 <p>Pictogram(s):</p> <p>Signal word: Danger</p> <p>Hazard Statement(s): H340 – May cause genetic defects H350 – May cause cancer H361 – Suspected of damaging fertility or the unborn child H318 – Causes serious eye damage H302 – Harmful if swallowed H332 – Harmful if inhaled H315 – Causes skin irritation</p> <p>Hazard Statement(s) not listed on the label: H317 – May cause an allergic skin reaction H410 – Very toxic to aquatic life with long lasting effects. H373 – May cause damage to organs through prolonged or repeated exposure</p> <p>Precautionary Statements(s): P202 – Do not handle until all safety precautions [and hazard statements] have been read and understood.</p> <p>Precautionary statement(s) not listed on label: P280 – Wear protective gloves/protective clothing/eye protection/face protection. P362 – Take off contaminated clothing and wash before reuse P308 + P313 – IF exposed or concerned: Get medical advice/attention. P260 – Do not breathe dust/fume/gas/mist/vapours/spray. P314 – Get medical advice/attention if you feel unwell. P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P264 – Wash skin thoroughly after handling. P270 – Do not eat, drink or smoke when using this product. P301 + P312 – IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell. P302 + P352 – IF ON SKIN: wash with plenty of soap and water. P332 + P313 – IF SKIN irritation occurs: Get medical advice/attention. P333 + P313 – IF SKIN irritation or rash occurs: Get medical advice/attention. P363 – Wash contaminated clothing before reuse.</p>

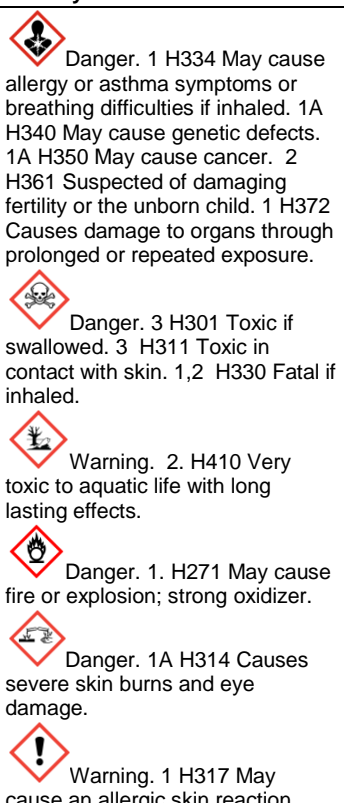
NFPA Scale: 0-4			
HMIS (U.S.A.) Scale: 0-4	HEALTH	2	
	FLAMMABILITY	0	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	D	
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: This mixture does not contain any substances that are assessed to be a vPvB.		

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	%
Chromium(VI) oxide	1333-82-0	215-607-8	 <p>Danger. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. 1A H340 May cause genetic defects. 1A H350 May cause cancer. 2 H361 Suspected of damaging fertility or the unborn child. 1 H372 Causes damage to organs through prolonged or repeated exposure.</p> <p>Danger. 3 H301 Toxic if swallowed. 3 H311 Toxic in contact with skin. 1,2 H330 Fatal if inhaled.</p> <p>Warning. 2. H410 Very toxic to aquatic life with long lasting effects.</p> <p>Danger. 1. H271 May cause fire or explosion; strong oxidizer.</p> <p>Danger. 1A H314 Causes severe skin burns and eye damage.</p> <p>Warning. 1 H317 May cause an allergic skin reaction.</p>	≤ 10

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 and get immediate medical attention.

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 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: Chromium trioxide ACGIH: 0.05 mg/m³ TWA (as Cr) (listed under Chromium (VI) compounds-water soluble) NIOSH: 0.001 mg/m³ TWA (as Cr) 15 mg/m³ IDLH (as Cr (VI)) OSHA: none listed</p>
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8.2 Exposure controls	<p>Personal Protective Equipment (PPE):</p> <p>Eye/Face protection. 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	Liquid
Color	Transparent Red
Odor	Odorless
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	Oxidizing Solution

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	No hazardous reactions known.

Hazardous Reactions	
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Lithium, glycerol, oxidizing agents and any combustible material, reducing agents, acetic acid, Dimethyl formamide, acetone, methanol, ethanol, pyridine, camphor, ethanol, turpentine.
10.6 Hazardous Decomposition Materials	Chromic oxides

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	<p>Acute Toxicity. Chromium Trioxide: <u>LD50/LC50:</u> CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg. CAS# 1333-82-0: Oral, mouse: LD50 = 127 mg/kg Oral, rat: LD50 = 80 mg/kg.</p> <p>Skin Corrosion/Irritation. Irritating to skin and mucous membranes. Skin absorption may affect kidneys. Large amounts may cause kidney failure.</p> <p>Serious Eye Damage/Irritation. Corrosive to eye. Prolonged exposure will cause blindness.</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). CAS # 1333-82-0 ACGIH: A1 - Confirmed Human Carcinogen (listed as 'Chromium (VI) compounds - water soluble') California: carcinogen, initial date 2/27/87 (listed as 'Chromium (VI) compounds'). National Toxicology Program (NTP). Known Carcinogen</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.	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: 1755 ADR/RID: 1755 IMDG: 1755 IATA: 1755
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	ADR/RID: Chromic acid solution IMDG: Chromic acid solution IATA: Chromic acid solution DOT: Chromic acid solution
14.3 Transport Hazard Class(es)	DOT: 8 IATA: 8 IMDG: 8 ADR/RID: 8 
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	This product contains a chemical known to the state of California to cause cancer. Chromium trioxide CAS 1333-82-0
Right To Know Components	Massachusetts: Chromium trioxide CAS 1333-82-0 Pennsylvania: Chromium trioxide CAS 1333-82-0 New Jersey: Chromium trioxide CAS 1333-82-0
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R24/25 EN: Toxic in contact with skin and if swallowed. DA: Giftig ved hudkontakt og ved indtagelse. DE: Giftig bei Berührung mit der Haut und beim Verschlucken. EL: Τοξικό σε επαφή με το δέρμα και σε περίπτωση καταπόσεως. ES: Tóxico en contacto con la piel y por ingestión.

	<p>FR: Toxique par contact avec la peau et par ingestion. IT: Tossico a contatto con la pelle e per ingestione. NL: Vergiftig bij aanraking met de huid en bij opname door de mond. PT: Tóxico em contacto com a pele e por ingestão. SV: Giftigt vid hudkontakt och förtäring.</p> <p>R26 EN: Very toxic by inhalation. DA: Meget giftig ved indånding. DE: Sehr giftig beim Einatmen. EL: Πολύ τοξικό όταν εισπνέεται. ES: Muy tóxico por inhalación. FR: Très toxique par inhalation. IT: Molto tossico per inalazione. NL: Zeer vergiftig bij inademing. PT: Muito tóxico por inalação. SV: Mycket giftigt vid inandning.</p> <p>R35 EN: Causes severe burns. DA: Alvorlig ætsningsfare. DE: Verursacht schwere Verätzungen. EL: Προκαλεί σοβαρά εγκαύματα. ES: Provoca quemaduras graves. FR: Provoque de graves brulures. IT: Provoca gravi ustioni. NL: Veroorzaakt ernstige brandwonden. PT: Provoca quemaduras graves. SV: Starkt frätande.</p> <p>R42/43 EN: May cause sensitization by inhalation and skin contact. DA: Kan give overfølsomhed ved indånding og ved kontakt med huden. DE: Sensibilisierung durch Einatmen und Hautkontakt möglich. EL: Μπορεί να προκαλέσει ευαισθητοποίηση όταν εισπνέεται και σε επαφή με το δέρμα. ES: Posibilidad de sensibilización por inhalación y por contacto con la piel. FR: Peut entraîner une sensibilisation par inhalation et par contact avec la peau. IT: Può provocare sensibilizzazione per inalazione e contatto con la pelle. NL: Kan overgevoeligheid veroorzaken bij inademing of contact met de huid. PT: Pode causar sensibilização por inalação e em contacto com a pele. SV: Kan ge allergi vid inandning och hudkontakt.</p> <p>R45 EN: May cause cancer. DA: Kan fremkalde kræft. DE: Kann Krebs erzeugen. FR: Peut provoquer le cancer. IT: Può provocare il cancro. ES: Puede causar cáncer. 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>R46 EN: May cause heritable genetic damage. DA: Kan forårsage arvelige genetiske skader. DE: Kann vererbare Schäden verursachen. FR: Peut provoquer des altérations génétiques héréditaires. IT: Può provocare alterazioni genetiche ereditarie. ES: Puede causar alteraciones genéticas hereditarias. FR: Peut provoquer des altérations génétiques héréditaires.</p>
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	<p>IT: Può provocare alterazioni genetiche ereditarie. NL: Kan erfelijke genetische schade veroorzaken. PT: Pode causar alterações genéticas hereditárias. SV: Kan ge ärtliga genetiska skador.</p> <p>R48/23 EN: Toxic: danger of serious damage to health by prolonged exposure through inhalation. DA: Giftig: alvorlig sundhedsfare ved længere tids påvirkning ved indånding. DE: Giftig: Gefahr ernster Gesundheitsschäden bei längerer Exposition durch Einatmen. EL: Τοξικό: κίνδυνος σοβαρής βλάβης της υγείας ύστερα από παρατεταμένη έκθεση όταν εισπνέεται. ES: Tóxico: riesgo de efectos graves para la salud en caso de exposición prolongada por inhalación. FR: Toxique: risque d'effets graves pour la santé en cas d'exposition prolongée par inhalation. IT: Tossico: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione. NL: Vergiftig: gevaar voor ernstige schade aan de gezondheid bij langdurige blootstelling bij inademing. PT: Tóxico: risco de efeitos graves para a saúde em caso de exposição prolongada por inalação. SV: Giftigt: risk för allvarliga hälsoskador vid långvarig exponering genom inandning.</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: Tres toxique pour les organismes aquatiques, peut entraîner des effets nefastes a long terme pour l'environnement aquatique. IT: Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico. NL: Zeer vergiftig voor in het water levende organismen; kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken. PT: Muito tóxico para os organismos aquáticos, podendo causar efeitos nefastos a longo prazo no ambiente aquático. SV: Mycket giftigt för vattenlevande organismer, kan orsaka skadliga långtidseffekter i vattenmiljön.</p> <p>R62 EN: Possible risk of impaired fertility. DA: Mulighed for skade på forplantningsevnen. DE: Kann möglicherweise die Fortpflanzungsfähigkeit beeinträchtigen. EL: Πιθανός κίνδυνος για εξασθένηση της γονιμότητας. ES: Posible riesgo de perjudicar la fertilidad. FR: Risque possible d'altération de la fertilité. IT: Possibile rischio di ridotta fertilità. NL: Mogelijk gevaar voor verminderde vruchtbaarheid. PT: Possíveis riscos de comprometer a fertilidade. SV: Möjlig risk för nedsatt fortplantningsförmåga.</p>
<p>S phrases</p>	<p>S1/2 EN: Keep locked up and out of the reach of children. DA: Opbevares under lås og utilgængeligt for børn. DE: Unter Verschluss und für Kinder unzugänglich aufbewahren. EL: Φυλάξτε το κλειδωμένο και μακριά από παιδιά. ES: Conservese bajo llave y manténgase fuera del alcance de los niños. FR: Conserver sous clef et hors de portee des enfants. IT: Conservare sotto chiave e fuori della portata dei bambini. NL: Achter slot en buiten bereik van kinderen bewaren. PT: Guardar fechado à chave e fora do alcance das crianças. SV: Förvaras i låst utrymme och oåtkomligt för barn.</p> <p>S53</p>

	<p>EN: Avoid exposure — obtain special instructions before use. DA: Undgå enhver kontakt — indhent særlige anvisninger før brug. DE: Exposition vermeiden — vor Gebrauch besondere Anweisungen einholen. EL: Αποφεύγετε την έκθεση — εφοδιαστείτε με τις ειδικές οδηγίες πριν από τη χρήση. ES: Evítese la exposición — recábense instrucciones especiales antes del uso. FR: Éviter l'exposition — se procurer des instructions spéciales avant l'utilisation. IT: Evitare l'esposizione — procurarsi speciali istruzioni prima dell'uso. NL: Blootstelling vermijden — vóór gebruik speciale aanwijzingen raadplegen. PT: Evitar a exposição — obter instruções específicas antes da utilização. SV: Undvik exponering — Begär specialinstruktioner före användning.</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 επκέτα 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> <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: Evítese 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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Safety Data Sheet

Emergency 1-800-424-9300
Contact (intl.) 1-352-323-3500

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.

Borax (Sodium Borate) Solution 5%



Section 1. Identification

1.1 Product Identifier	Product Name: Borax (Sodium Borate) Solution 5% Product Number: SSC1126	
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)	Reproductive toxicity (Category 1B), H360
Classification: OSHA 29 CFR 1910.1200 HCS	Reproductive toxicity (Category 1B), H360
Classification: Directive 1999/45/EC	 T, R60, R61, S45, S53 EN: Toxic DA: Giftig DE: Giftig EL: Τοξικό ES: Tóxico FR: Toxique IT: Tossico NL: Vergiftig PT: Tóxico SV: Giftig For full text of R- & S- phrases: see Section 15.

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2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H360 – May damage fertility or the unborn child. Precautionary statement(s): P280 – Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 – IF exposed or concerned: Get medical advice/attention										
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>C</td></tr> </table>	HEALTH	1	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	C		
HEALTH	1										
FLAMMABILITY	0										
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: 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	%
Sodium Tetraborate	1303-96-4	215-540-4	 Danger. H360 May damage fertility or the unborn child.	≤ 5

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water. Get immediate medical attention if concerned or 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 medical attention if you feel unwell.

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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	Borane/born oxides, Sodium 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: Sodium Tetraborate: NIOSH REL: TWA 1 mg/m ³ OSHA PEL _T : none
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.

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	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
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	Strong oxidizing agents. Strong reducing agents.
10.6 Hazardous Decomposition Materials	None known.

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Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. Sodium Tetraborate: LD50 Oral - rat - 4,500-5,000 mg/kg LD50 Dermal - rabbit - 10,000 mg/kg Skin Corrosion/Irritation. May be irritating to skin and mucous membranes. Serious Eye Damage/Irritation. May be irritating to 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: sodium tetraborate; LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h Crustacea: No relevant studies identified. Algae/Aquatic Plants: sodium tetraborate ; IC50 - Desmodesmus subspicatus (green algae) - 158 mg/l - 96 h. Other Organisms: sodium tetraborate; Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 1,085 - 1, 402 mg/l - 48 h
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: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
14.2 UN Proper Shipping	ADR/RID: Not dangerous goods.

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Name DOT, IATA,IMDG, ADR	IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
14.3 Transport Hazard Class(es)	DOT: Not dangerous goods. IATA: Not dangerous goods. IMDG: Not dangerous goods. ADR/RID: Not dangerous goods.
14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
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	Disodium Tetraborate decahydrate: 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	<p>R60 EN: This material and its container must be disposed of as hazardous waste. DA: Kan skade forplantningsevnen. DE: Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen. EL: Μπορεί να εξασθενίσει τη γονιμότητα. ES: Elimínense el producto y su recipiente como residuos peligrosos. FR: Eliminer le produit et son recipient comme un dechet dangereux. IT: Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi. NL: Kan de vruchtbaarheid schaden. PT: Pode comprometer a fertilidade. SV: Kan ge nedsatt fortplantningsförmåga.</p> <p>R61 EN: May cause harm to the unborn child. DA: Kan skade barnet under graviditeten. DE: Kann das Kind im Mutterleib schädigen. EL: Μπορεί να βλάψει το έμβρυο κατά τη διάρκεια της κύησης. ES: Riesgo durante el embarazo de efectos adversos para el feto. FR: Risque pendant la grossesse d'effets néfastes pour l'enfant. IT: Può danneggiare i bambini non ancora nati. NL: Kan het ongeboren kind schaden. PT: Risco durante a gravidez com efeitos adversos na descendência. SV: Kan ge fosterskador.</p>

Borax (Sodium Borate) Solution 5%

S phrases	<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 επικότα 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> <p>S53 EN: Avoid exposure — obtain special instructions before use. DA: Undgå enhver kontakt — indhent særlige anvisninger før brug. DE: Exposition vermeiden — vor Gebrauch besondere Anweisungen einholen. EL: Αποφεύγετε την έκθεση — εφοδιαστείτε με τις ειδικές οδηγίες πριν από τη χρήση. ES: Evítense la exposición — recábense instrucciones especiales antes del uso. FR: Éviter l'exposition — se procurer des instructions spéciales avant l'utilisation. IT: Evitare l'esposizione — procurarsi speciali istruzioni prima dell'uso. NL: Blootstelling vermijden — vóór gebruik speciale aanwijzingen raadplegen. PT: Evitar a exposição — obter instruções específicas antes da utilização. SV: Undvik exponering — Begär specialinstruktioner före användning.</p>

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.