




Section 1. Identification

1.1 Product Identifier	Product Name: Hematoxylin Solution (5%) Product Number: SSC1042	
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)	Flammable liquids (Category 2) – H225 Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319
Classification: OSHA 29 CFR 1910.1200 HCS	Flammable liquids (Category 2) – H225 Skin irritation (Category 2) – H315 Eye irritation (Category 2A) – H319
Classification: Directive 1999/45/EC	 <p>F R11, R36, S2, S7, S16, S24/25 S26 EN: Highly flammable DA: Meget brandfarlig DE: Leichtentzündlich EL: Πολύ εύφλεκτο ES: Fácilmente inflamable FR: Facilement inflammable IT: Facilmente infiammabile NL: Licht ontvlambaar PT: Facilmente inflamável SV: Mycket brandfarligt</p> <p>For full text of R- & S- phrases: see Section 15.</p>




2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H226 – Flammable liquid and vapour H319 – Causes serious eye irritation. H315 – Causes skin irritation Precautionary statement(s): P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 – IF IN EYES: Rinse cautiously with water for several minutes. P337 + P313 – If eye irritation persists: 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>3</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>G</td> </tr> </table>	HEALTH	1	FLAMMABILITY	3	PHYSICAL HAZARD	0	PERSONAL PROTECTION	G		
HEALTH	1										
FLAMMABILITY	3										
PHYSICAL HAZARD	0										
PERSONAL PROTECTION	G										
2.3 Other Hazards	PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: This mixture does not contain any substances that are assessed to be a vPvB.										


Section 3. Composition and Information on Ingredients

3.2 Chemical Description: Mixture

*May contain additional non-hazardous proprietary ingredients.

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

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Ethanol	64-17-5	200-578-6	 Danger. 2 H225 Highly flammable liquid and vapour.	≤ 93
Isopropanol	67-63-0	200-661-7	 Warning. 2. H319 Causes serious eye irritation. 3. H336 May cause drowsiness or dizziness.  Danger. 3 H225 Highly flammable liquid and vapour.	≤ 5

Hematoxylin	517-28-2	208-237-3	 Warning. 4 H302 Harmful if swallowed. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤ 5
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Section 4. First Aid Measures

4.1 Description of first aid measures

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

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

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

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

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

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

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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

Section 7. Handling and Storage

7.1 Precautions for safe handling.

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

7.2 Conditions for safe storage, including any incompatibilities.

Store in well ventilated area.

Keep container tightly closed.

Store at 15-30°C.

7.3 Specific end use(s).

See section 1.2

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	<p>Exposure Limits: <i>Ethanol:</i> NIOSH REL: 1000 ppm (1900 mg/m³) TWA OSHA PEL: 1000 ppm (1900 mg/m³) TWA ACGIH TLV: 1000ppm (1900mg/m³) TWA <i>Isopropanol:</i> NIOSH REL: TWA 400 ppm (980 mg/m³) ST 500 ppm (1225 mg/m³) OSHA PEL: TWA 400 ppm (980 mg/m³) ACGIH TLV: TWA 200 ppm STEL 400 ppm</p>
8.2 Exposure controls	<p>Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.</p>
Engineering Controls	<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/brown
Odor	Mild alcohol 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 oxidizers, silver salts, acid chlorides, alkali metals, metal hydrides, hydrazine.
10.6 Hazardous Decomposition Materials	Will not occur.

Section 11. Toxicological Information

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

Section 12. Ecological Information

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

Section 13. Disposal Considerations

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

Section 14. Transport Information

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

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	None of the components in this mixture are listed.
Right To Know Components	<u>Ethanol</u> Massachusetts Pennsylvania New jersey <u>Isopropanol</u> Massachusetts Pennsylvania New jersey <u>Hematoxylin</u> Pennsylvania New Jersey
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	R11

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

	<p>DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p> <p>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p>
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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: Ferric Chloride (10% Aqueous) Product Number: SSC1073	
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 GHS Classification	Skin irritation (Category 2) – H315 Serious eye damage (Category 1) – H318	
Classification: Directive 1999/45/EC		C R22, R41; S24/25, S28, S37/39 EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande For full text of R- & S- phrases: see Section 15.




2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H315 – Causes skin irritation H320 – Causes serious eye damage Precautionary statement(s): P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.		
NFPA Scale: 0-4			
HMIS (U.S.A.) Scale: 0-4	HEALTH	2	
	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	%
Ferric Chloride	10025-77-1	231-729-4	 Warning. 1. H290 May be corrosive to metals.  Warning. 4 H302 Harmful if swallowed. 2 H315 Causes skin irritation.  Danger. 1 H318 Causes serious eye damage.	≤ 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. 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: Ferric chloride: TWA 1 mg/m ³ STEL 2 mg/m ³
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	Orange
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	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	Metals, allyl chloride, sodium, potassium.
10.6 Hazardous Decomposition Materials	Hydrogen Chloride Fumes.

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. Corrosive to eye. Respiratory or skin sensitization. No relevant data available. Germ Cell Mutagenicity. No relevant data available.
Carcinogenicity.	International Agency for Research on Cancer (IARC). 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	<p>R22 EN: Harmful if swallowed. DA: Farlig ved indtagelse. DE: Gesundheitsschädlich beim Verschlucken. EL: Επιβλαβές σε περίπτωση καταπόσεως. ES: Nocivo por ingestión. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. NL: Schadelijk bij opname door de mond. PT: Nocivo por ingestão. SV: Farligt vid förtäring.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskaade. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p>
S phrases	<p>S24/25 EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p>

	<p>S24/25 EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p> <p>S28 EN: After contact with skin, wash immediately with plenty of water. DA: Kommer stof på huden vaskes straks med store mængder ... (angives af fabrikanten). DE: Bei Berührung mit der Haut sofort abwaschen mit viel ... (vom Hersteller anzugeben). EL: Σε περίπτωση επαφής με το δέρμα, πλυθείτε αμέσως με άφθονο ... (το είδος του υγρού καθορίζεται από τον παραγωγό). ES: En caso de contacto con la piel, lávese inmediata y abundantemente con ... (productos a especificar por el fabricante). FR: Après contact avec la peau, se laver immédiatement et abondamment avec ... (produits appropriés à indiquer par le fabricant). IT: In caso di contatto con la pelle lavarsi immediatamente ed abbondantemente con ... (prodotti idonei da indicarsi da parte del fabbricante). NL: Na aanraking met de huid onmiddellijk wassen met veel ... (aan te geven door de fabrikant). PT: Após contacto com a pele, lavar imediata e abundantemente com ... (produtos adequados a indicar pelo produtor). SV: Vid kontakt med huden tvätta genast med mycket ... (anges av tillverkaren).</p> <p>S37/39 EN: Wear suitable gloves and eye/face protection. DA: Brug egnede beskyttelseshandsker og -briller/ansigtsskærm under arbejdet. DE: Bei der Arbeit geeignete Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. EL: Φοράτε κατάλληλα γάντια και συσκευή προστασίας ματιών/προσώπου. ES: Usense guantes adecuados y protección para los ojos/la cara. FR: Porter des gants appropriés et un appareil de protection des yeux/du visage. IT: Usare guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p>
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Section 16. Other Information

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: Lugol's Iodine Solution Product Number: SSC1090	
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)	Specific target organ toxicity Oral (Category 1) – H372 Acute aquatic toxicity (Category 3) – H402
Classification: OSHA 29 CFR 1910.1200 HCS	Specific target organ toxicity Oral (Category 1) – H372 Acute aquatic toxicity (Category 3) – H402
Classification: Directive 1999/45/EC	 <p>Xn R20/21, S23, S25 EN: Harmful DA: Sundhedsskadelig DE: Gesundheitsschädlich EL: Επιβλαβές ES: Nocivo FR: Nocif IT: Nocivo NL: Schadelijk PT: Nocivo SV: Hälsoskadlig</p>




	 <p>N: R50 EN: Dangerous for the environment DA: Miljøfarlig DE: Umweltgefährlich EL: Επικίνδυνο για το περιβάλλον ES: Peligroso para el medio ambiente FR: Dangereux pour l'environnement IT: Pericoloso per l'ambiente NL: Milieugevaarlijk PT: Perigoso para o ambiente SV: Miljöfarlig'</p> <p>For full text of R- & S- phrases: see Section 15.</p>								
2.2 Label Elements	<p>Pictogram(s):</p>  <p>Signal word: Danager</p> <p>Hazard statement(s): H372 – Causes damage to organs through prolonged or repeated exposure (Thyroid). H402 – Harmful to aquatic life</p> <p>Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.</p> <p>Precautionary statement(s) not listed on label: P314 – Get medical advice/attention if you feel unwell P273 – Avoid release to the environment</p>								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<table border="1"> <tr> <td>HEALTH</td> <td>2</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>B</td> </tr> </table>	HEALTH	2	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B
HEALTH	2								
FLAMMABILITY	0								
PHYSICAL HAZARD	0								
PERSONAL PROTECTION	B								
2.3 Other Hazards	<p>PBT: This mixture does not contain any substances that are assessed to be a PBT. vPvB: This mixture does not contain any substances that are assessed to be a vPvB.</p>								

Section 3. Composition and Information on Ingredients

3.2 Chemical Description: Mixture

*May contain additional non-hazardous proprietary ingredients.

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

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Potassium Iodide	7681-11-0	231-659-4	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤4
Iodine	7553-56-2	231-442-4	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H302 Harmful if swallowed.  Warning. 1 H400 Very toxic to aquatic life.	≤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 symptoms develop.

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

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

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

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

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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

Section 7. Handling and Storage

7.1 Precautions for safe handling.

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

7.2 Conditions for safe storage, including any incompatibilities.

Store in well ventilated area.
 Keep container tightly closed.
 Store at 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: Potassium iodide ACGIH: 0.01mg/m3 TWA Iodine OSHA: 0.1ppm C NIOSH 0.1ppm C ACGIH: 0.1 STEL
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	Dark amber/brown slightly transparent.
Odor	Slight iodine 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	Liquid chlorine, acetaldehyde, ammonia, salt + ethanol, ammonium hydroxide, methyl alcohol, antimony, silver azide, lithium, potassium, sodium, phosphorous, bromine pentafluoride, fluorine, oxygen difluoride, magnesium, finely divided metals, organic solvents, rubber goods, plastics, zinc, aluminum, alkali metals, sulphur, ammonia solutions, Bromine trifluoride, reducing agents, iron, ethanol + butadiene; ethanol + phosphorous; ethanol + methanol + Hg; formamide + pyridine + sulfur trioxide; formamide; halogens or interhalogens; mercuric oxide; metal carbides; oxygen; pyridine; sodium hydride. Violent reaction with iodine and aluminum + diethyl ether...(and) titanium (above 113 deg C) (Iodine).
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 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	<p><u>Potassium Iodide</u> Pennsylvania New Jersey</p> <p><u>Iodine</u> Massachusetts Pennsylvania New Jersey</p>
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	<p>R20/21 EN: Harmful by inhalation and in contact with skin. DA: Farlig ved indånding og ved hudkontakt. DE: Gesundheitsschädlich beim Einatmen und bei Berührung mit der Haut. EL: Επιβλαβές όταν εισπνέεται και σε επαφή με το δέρμα. ES: Nocivo por inhalación y en contacto con la piel. FR: Nocif par inhalation et par contact avec la peau. IT: Nocivo per inalazione e contatto con la pelle. NL: Schadelijk bij inademing en bij aanraking met de huid. PT: Nocivo em contacto com a pele. SV: Farligt vid inandning och hudkontakt.</p> <p>R50 EN: Very toxic to aquatic organisms. DA: Meget giftig for organismer, der lever i vand. DE: Sehr giftig für Wasserorganismen. EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς. ES: Muy tóxico para los organismos acuáticos. FR: Très toxique pour les organismes aquatiques. IT: Altamente tossico per gli organismi acquatici. NL: Zeer vergiftig voor in het water levende organismen. PT: Muito tóxico para os organismos aquáticos. SV: Mycket giftigt för vattenlevande organismer.</p>
S phrases	<p>S23 EN: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). DA: Undgå indånding af gas/røg/dampe/aerosol-tåger (den eller de pågældende betegnelser angives af fabrikanten). DE: Gas/Rauch/Dampf/Aerosol nicht einatmen (geeignete Bezeichnung(en) vom Hersteller anzugeben). EL: Μην αναπνέετε αέρια/αναθυμιάσεις/ατμούς/εκνεφώματα (η κατάλληλη διατύπωση καθορίζεται από τον παραγωγό). ES: No respirar los gases/humos/vapores/aerosoles (denominación(es) adecuada(s) a especificar por el fabricante). FR: Ne pas respirer les gaz/fumées/vapeurs/aérosols (terme(s) approprié(s) à indiquer par le fabricant). IT: Non respirare i gas/fumi/vapori/aerosoli (termine(i) appropriato(i) da precisare da parte del produttore). NL: Gas/rook/damp/spuitnevel niet inademen. (toepasselijke term(en) aan te geven door de fabrikant). PT: Não respirar os gases/vapores/fumos/aerossóis (termo(s) apropriado(s) a indicar pelo produtor). SV: Undvik inandning av gas/rök/ånga/dimma (lämplig formulering anges av tillverkaren).</p> <p>S25 EN: Avoid contact with eyes. DA: Undgå kontakt med øjnene. DE: Berührung mit den Augen vermeiden. EL: Αποφύγετε την επαφή με τα μάτια. ES: Evítese el contacto con los ojos. FR: Éviter le contact avec les yeux.</p>

	<p>IT: Evitare il contatto con gli occhi. NL: Aanraking met de ogen vermijden. PT: Evitar o contacto com os olhos. SV: Undvik kontakt med ögonen.</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 securite. IT: Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza. NL: Voorkom lozing in het milieu. Vraag om speciale instructies/veiligheidskaart. PT: Evitar a libertação para o ambiente. Obter instruções específicas/fichas de segurança. SV: Undvik utsläpp till miljön. Läs särskilda instruktioner/varuinformationsblad.</p>
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Section 16. Other Information

Revision Date: 2019-01-11


Notice to Reader:



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

Section 1. Identification

1.1 Product Identifier	Product Name: Ferric Chloride (2%) Differentiating Solution Product Number: SSC1203	
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 GHS Classification	Skin irritation (Category 2) – H315 Serious eye damage (Category 1) – H318	
Classification: Directive 1999/45/EC		C R22, R41; S24/25, S28, S37/39 EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande For full text of R- & S- phrases: see Section 15.




2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H315 – Causes skin irritation H320 – Causes serious eye damage Precautionary statement(s): P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.			
NFPA Scale: 0-4				
HMIS (U.S.A.) Scale: 0-4	HEALTH	2		
	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	%
Ferric Chloride	10025-77-1	231-729-4	 Warning. 1. H290 May be corrosive to metals.  Warning. 4 H302 Harmful if swallowed. 2 H315 Causes skin irritation.  Danger. 1 H318 Causes serious eye damage.	≤ 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 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: Ferric chloride: TWA 1 mg/m ³ STEL 2 mg/m ³
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	Orange
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	Metals, allyl chloride, sodium, potassium.
10.6 Hazardous Decomposition Materials	Hydrogen Chloride Fumes.

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. Causes serious damage 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	<p>R22 EN: Harmful if swallowed. DA: Farlig ved indtagelse. DE: Gesundheitsschädlich beim Verschlucken. EL: Επιβλαβές σε περίπτωση καταπόσεως. ES: Nocivo por ingestión. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. NL: Schadelijk bij opname door de mond. PT: Nocivo por ingestão. SV: Farligt vid förtäring.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskaede. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p>
S phrases	<p>S24/25 EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p>

	<p>S28 EN: After contact with skin, wash immediately with plenty of water. DA: Kommer stof på huden vaskes straks med store mængder ... (angives af fabrikanten). DE: Bei Berührung mit der Haut sofort abwaschen mit viel ... (vom Hersteller anzugeben). EL: Σε περίπτωση επαφής με το δέρμα, πλυθείτε αμέσως με άφθονο ... (το είδος του υγρού καθορίζεται από τον παραγωγό). ES: En caso de contacto con la piel, lávese inmediata y abundantemente con ... (productos a especificar por el fabricante). FR: Après contact avec la peau, se laver immédiatement et abondamment avec ... (produits appropriés à indiquer par le fabricant). IT: In caso di contatto con la pelle lavarsi immediatamente ed abbondantemente con ... (prodotti idonei da indicarsi da parte del fabbricante). NL: Na aanraking met de huid onmiddellijk wassen met veel ... (aan te geven door de fabrikant). PT: Após contacto com a pele, lavar imediata e abundantemente com ... (produtos adequados a indicar pelo produtor). SV: Vid kontakt med huden tvätta genast med mycket ... (anges av tillverkaren).</p> <p>S37/39 EN: Wear suitable gloves and eye/face protection. DA: Brug egnede beskyttelseshandsker og -briller/ansigtsskærm under arbejdet. DE: Bei der Arbeit geeignete Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. EL: Φοράτε κατάλληλα γάντια και συσκευή προστασίας ματιών/προσώπου. ES: Úsense guantes adecuados y protección para los ojos/la cara. FR: Porter des gants appropriés et un appareil de protection des yeux/du visage. IT: Usare guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p>
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Section 16. Other Information

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.

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.

Sodium Thiosulfate Solution 5%

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

Sodium Thiosulfate Solution 5%

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>
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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>
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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.

Sodium Thiosulfate Solution 5%

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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Sodium Thiosulfate Solution 5%

	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.

Sodium Thiosulfate Solution 5%

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: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.

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: Acetic Acid Solution (3%) Product Number: SSC1033	
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 2A), H319	
Classification: OSHA 29 CFR 1910.1200 HCS	Skin irritation (Category 2), H315 Eye Irritation (Category 2A), H319	
Classification: Directive 1999/45/EC		Xi, S1/2, S26, S45 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 H319 – Causes serious 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.	≤ 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 and get immediate medical attention if irritation persists.

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

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

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious

person. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention if symptoms arise.

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.
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: 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</p>
8.2 Exposure controls	<p>Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required.</p>

	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	Slight vinegar odor.
Odor Threshold	Unknown
pH	2.0-3.0
Melting Point/ Freezing Point	~0°C (32°F)
Initial Boiling Point	Approx. 100°C (212°F)
Flash Point	Unknown
Evaporation Rate	(water=1): ~1
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	(Air = 1): Same as water.
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	Strong oxidizing agents, strong acids, strong bases.
10.5 Incompatible Materials	Reactive with strong oxidizing agents, reducing agents, metals, acids, and alkalis.
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. Irritating to skin and mucous membranes. Serious Eye Damage/Irritation. Severely 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	Massachusetts: Acetic Acid CAS # 64-19-7 Pennsylvania: Acetic Acid CAS # 64-19-7 New Jersey: Acetic Acid CAS # 64-19-7
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>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: Consérvese 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>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p>

	<p>S45 EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where 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 επικέτα 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: Acetic Acid Solution (1%) Product Number: SSC1031	
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 2A), H319	
Classification: OSHA 29 CFR 1910.1200 HCS	Skin irritation (Category 2), H315 Eye Irritation (Category 2A), H319	
Classification: Directive 1999/45/EC	 <p>Xi, S1/2, S26, S45 EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande</p> <p>For full text of R- & S- phrases: see Section 15.</p>	



2.2 Label Elements	Pictogram(s):  Signal Word: Warning Hazard Statement(s): H315 – Causes skin irritation H319 – Causes serious 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.	≤ 1

Section 4. First Aid Measures

4.1 Description of first aid measures

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

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.
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
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	Slight vinegar odor.
Odor Threshold	Unknown
pH	(1% soln/water): Neutral
Melting Point/ Freezing Point	0°C (32°F)
Initial Boiling Point	100°C (212°F)
Flash Point	Unknown
Evaporation Rate	(water=1): 1
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	(mmHg): 18 @ 20°C
Vapor Density	(Air = 1): Same as water.
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	1.222 mPa·s at 20°C
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	Strong oxidizing agents, strong acids, strong bases.
10.5 Incompatible Materials	Reactive with strong oxidizing agents, reducing agents, metals, acids, and alkalis.
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. Irritating to skin and mucous membranes. Serious Eye Damage/Irritation. Severely 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	Massachusetts: Acetic Acid CAS # 64-19-7 Pennsylvania: Acetic Acid CAS # 64-19-7 New Jersey: Acetic Acid CAS # 64-19-7
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>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>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p>S45 EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where</p>

	<p>possible).</p> <p>DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt.</p> <p>DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).</p> <p>EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την επικήτα αν είναι δυνατό).</p> <p>ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta).</p> <p>FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette).</p> <p>IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).</p> <p>NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).</p> <p>PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo).</p> <p>SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p>
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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: Alcian Blue Solution, pH 2.5 Product Number: SSC1040	
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 GHS Classification	Skin irritation (Category 2), H315 Serious eye irritation (Category 2), H319	
Classification: Directive 1999/45/EC	 <p>Xi, R36/38, S24/25, S37/39 EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande</p> <p>For full text of R- & S- phrases: see Section 15.</p>	




2.2 Label Elements	Pictogram(s):  Signal word: Warning Hazard statement(s): H315 – Causes skin irritation H319 – Causes serious 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. P337 + 313 – If eye irritation persists 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>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	%
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.	≤ 3
Alcian Blue	75881-23-1	278-333-8	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤ 1

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water and get immediate medical attention.

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

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

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

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Copper 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: Acetic acid, glacial; ACGIH TLV: 15ppm (37 mg/m ³) STEL 10 ppm (25 mg/m ³) TWA NIOSH REL: 15 ppm (37 mg/m ³) STEL 10 ppm (25 mg/m ³) TWA OSHA PEL: 10 ppm (25 mg/m ³) TWA
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Blue
Odor	Mild acetic acid odor
Odor Threshold	Unknown
pH	2.50 ± 0.10
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 oxidants, bases.
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. Irritating to skin and mucous membranes. Serious Eye Damage/Irritation. Seriously irritating to eye. Respiratory or skin sensitization. No relevant data available. Germ Cell Mutagenicity. No relevant data available.
Carcinogenicity.	International Agency for Research on Cancer (IARC). None of the components are listed. National Toxicology Program (NTP). None of the components are listed.

Section 12. Ecological Information

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

Section 13. Disposal Considerations

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

Recommendations.	
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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	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	S24/25

	<p>EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p> <p>S37/39 EN: Wear suitable gloves and eye/face protection. DA: Brug egnede beskyttelseshandsker og -briller/ansigtsskærm under arbejdet. DE: Bei der Arbeit geeignete Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. EL: Φοράτε κατάλληλα γάντια και συσκευή προστασίας ματιών/προσώπου. ES: Úsense guantes adecuados y protección para los ojos/la cara. FR: Porter des gants appropriés et un appareil de protection des yeux/du visage. IT: Usare guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p>
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Section 16. Other Information

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: Biebrich Scarlet / Acid Fuchsin Solution Product Number: SSC1052	
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 GHS Classification	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H320	
Classification: Directive 1999/45/EC	 <p>Xi, R10, R35 EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande</p> <p>For full text of R- & S- phrases: see Section 15.</p>	





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	<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	%
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.	≤ 1
Biebrich Scarlet	4196-99-0	224-084-5	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤ 1
Acid Fuchsin	123334-10-1	221-816-5	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.	≤ 0.1

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water and get immediate medical attention.

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

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

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

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	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/m ³) STEL 10 ppm (25 mg/m ³) TWA NIOSH REL: 15 ppm (37 mg/m ³) STEL 10 ppm (25 mg/m ³) TWA OSHA PEL: 10 ppm (25 mg/m ³) TWA
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Dark Red
Odor	Slight vinegar smell.
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	Oxidizing agents, Strong oxidizing agents, Strong acids, Metals, Amines, Alcohols, Peroxides, permanganates, Soluble carbonates and phosphates, Hydroxides.
10.6 Hazardous Decomposition Materials	Carbon oxides.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. No relevant data available Skin Corrosion/Irritation. 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.
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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	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	<p>S24/25 EN: Avoid contact with skin and eyes. DA: Undgå kontakt med huden og øjnene. DE: Berührung mit den Augen und der Haut vermeiden. EL: Αποφεύγετε επαφή με το δέρμα και με τα μάτια. ES: Evítese el contacto con los ojos y la piel. FR: Éviter le contact avec la peau et les yeux. IT: Evitare il contatto con gli occhi e con la pelle. NL: Aanraking met de ogen en de huid vermijden. PT: Evitar o contacto com a pele e os olhos. SV: Undvik kontakt med huden och ögonen.</p> <p>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετέ τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p>S45 EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt. DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen). EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό). ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta). FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette). IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta). NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen). PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo). SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p>
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Section 16. Other Information

Revision Date: 2019-01-11


Notice to Reader:



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

Section 1. Identification

1.1 Product Identifier	Product Name: Phosphotungstic Acid Solution (5%) Product Number: SSC1181	
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 GHS Classification	Skin corrosion (Category 1B) – H314 Serious eye damage (Category 1) – H318	
Classification: Directive 1999/45/EC		C R22, R34, R41; S24/25, S26, S37/39, S46 EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande For full text of R- & S- phrases: see Section 15.


2.2 Label Elements	Pictogram(s):  Signal word: Danger Hazard statement(s): H314 – Causes severe skin burns and eye damage Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.										
NFPA Scale: 0-4											
HMIS (U.S.A.) Scale: 0-4	<table border="1"> <tr><td>HEALTH</td><td>2</td></tr> <tr><td>FLAMMABILITY</td><td>0</td></tr> <tr><td>PHYSICAL HAZARD</td><td>0</td></tr> <tr><td>PERSONAL PROTECTION</td><td>B</td></tr> </table>	HEALTH	2	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	B		
HEALTH	2										
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	%
Phosphotungstic Acid Hydrate	12501-23-4	n/a	 Danger. 1B, H314 Causes severe skin burns and eye damage.	≤ 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 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	May release phosphorus and tungsten oxides under fire conditions..
5.3 Advice for firefighters	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures	Wear chemical resistant clothing, gloves, and eye protection. Wear NIOSH/MSHA approved breathing apparatus.
6.2 Environmental precautions	Keep material away from heat, flame, ignition sources, and reactive materials. Don't allow product to enter drain.
6.3 Methods and materials for containment and cleaning up	Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

Section 7. Handling and Storage

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

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	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.
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Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Colorless to Slightly purple.
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.
10.6 Hazardous Decomposition Materials	May release phosphorus and tungsten oxides under fire conditions.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	Acute Toxicity. No relevant data available Skin Corrosion/Irritation. Corrosive to skin and mucous membranes. Serious Eye Damage/Irritation. Corrosive to eye. Respiratory or skin sensitization. No relevant data available. Germ Cell Mutagenicity. No relevant data available.
Carcinogenicity.	International Agency for Research on Cancer (IARC). 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: 3264 ADR/RID: 3264 IMDG: 3264 IATA: 3264
14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR	ADR/RID: Corrosive liquid, acidic, inorganic, n.o.s. (Phosphotungstic acid hydrate) IMDG: Corrosive liquid, acidic, inorganic, n.o.s. (Phosphotungstic acid hydrate) IATA: Corrosive liquid, acidic, inorganic, n.o.s. (Phosphotungstic acid hydrate). DOT: Corrosive liquid, acidic, inorganic, n.o.s. (Phosphotungstic acid hydrate)
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	None of the components in this mixture are listed.
Right To Know Components	None of the components in this mixture are listed.
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
R phrases	<p>R22 EN: Harmful if swallowed. DE: Gesundheitsschädlich beim Verschlucken. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. ES: Nocivo por ingestión.</p> <p>R34 EN: Causes burns. DA: Ætsningsfare. DE: Verursacht Verätzungen. EL: Προκαλεί εγκαύματα. ES: Provoca quemaduras. FR: Provoque des brulures. IT: Provoca ustioni. NL: Veroorzaakt brandwonden. PT: Provoca queimaduras. SV: Frätande.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskade. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p>
S phrases	<p>S24/25 EN: Avoid contact with skin and eyes. DE: Berührung mit den Augen und der Haut vermeiden. FR: Éviter le contact avec la peau et les yeux.</p>

	<p>IT: Evitare il contatto con gli occhi e con la pelle. ES: Evítese el contacto con los ojos y la piel.</p> <p>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετέ τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p> <p>S37/39 EN: Wear suitable gloves and eye/face protection. DE: Bei der Arbeit geeignete Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. FR: Porter des gants appropriés et un appareil de protection des yeux/du visage. IT: Usare guanti adatti e proteggersi gli occhi/la faccia. ES: Úsense guantes adecuados y protección para los ojos/la cara.</p> <p>S46 EN: If swallowed, seek medical advice immediately and show this container or label. DE: Bei Verschlucken sofort ärztlichen Rat einholen und Verpackung oder Etikett vorzeigen. 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. ES: En caso de ingestión, acúdase inmediatamente al medico y muéstrele la etiqueta o el envase.</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: Tartrazine Solution Product Number: SSC1190	
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 sensitisation (Category 1B) – H317	
Classification: OSHA 29 CFR 1910.1200 HCS	Skin sensitisation (Category 1B) – H317	
Classification: Directive 1999/45/EC		Xi R42/43 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): 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	%
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.	≤ 0.2
Tartrazine	1934-21-0	217-699-5	 Warning. 1. H317 May cause an allergic skin reaction.  Danger. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.	≤ 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 irritation persists.

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

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

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

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	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
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	10 ppm (25 mg/m ³) TWA NIOSH REL: 15 ppm (37 mg/m ³) STEL 10 ppm (25 mg/m ³) TWA OSHA PEL: 10 ppm (25 mg/m ³) TWA
8.2 Exposure controls	Personal Protective Equipment (PPE): Eye/Face protection. Safety glasses or goggles are required. Skin protection. Protective clothing is required. Hand protection. Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.
Engineering Controls	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Transparent yellow.
Odor	Very slight acetic acid 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 oxidizing agents.
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. 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: 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.

	<p>ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.</p> <p>FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste.</p> <p>IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico.</p> <p>NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen.</p> <p>PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista.</p> <p>SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p>
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