



**Section 1. Identification**

<b>1.1 Product Identifier</b>	Product Name: Picro-Sirius Red Solution Product Number: SSC1197	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	Cancer Diagnostics, Inc.
	<b>Address</b>	116 Page Point Circle Durham, NC 27703
	<b>Phone Number</b>	1-877-846-5393
	<b>Fax Number</b>	1-877-817-1716
	<b>e-mail</b>	<a href="mailto:compliance@cancerdiagnostics.com">compliance@cancerdiagnostics.com</a>
	<b>Website</b>	<a href="http://www.cancerdiagnostics.com/sds">www.cancerdiagnostics.com/sds</a>

**Section 2. Hazards Identification**

<b>2.1 GHS Classification</b>	Skin sensitization (Category 1) – H317	
<b>Classification: Directive 1999/45/EC</b>	Not sufficient data. For full text of R- & S- phrases: see Section 15.	
<b>2.2 Label Elements</b>	<b>Pictogram(s):</b>	
	<b>Signal word:</b>	Warning
	<b>Hazard statement(s):</b>	H317 – May cause an allergic skin reaction
	<b>Precautionary statement(s):</b>	P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.



<b>NFPA</b> Scale: 0-4			
<b>HMIS (U.S.A.)</b> Scale: 0-4	HEALTH	1	
	FLAMMABILITY	0	
	PHYSICAL HAZARD	0	
	PERSONAL PROTECTION	C	
<b>2.3 Other Hazards</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.		

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

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

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Picric Acid	88-89-1	201-865-9	 Danger. Div 1.1 H201 Explosive; mass explosion hazard  Danger. 3 H301 Toxic if swallowed. 3 H311 Toxic in contact with skin. 3 H331 Toxic if inhaled.	≤1.2 w/v
Direct Red 80	2610-10-8	220-027-3	N/A	≤0.1

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

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

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

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

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

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

See section 2.2 and 11.

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

No data available

### Section 5. Fire Fighting Measures

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	Dried picric acid forms explosive compounds. Do not allow material to completely dry.
<b>5.3 Advice for</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus

<b>firefighters</b>	(S.C.B.A.)
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## Section 6. Accidental Release Measures

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

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

### 6.2 Environmental precautions

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

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

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

## Section 7. Handling and Storage

### 7.1 Precautions for safe handling.

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

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

Store in well ventilated area.

Keep container tightly closed.

Store at 15-30°C.

### 7.3 Specific end use(s).

See section 1.2

## Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<b>Exposure Limits:</b> Picric Acid <b>NIOSH REL</b> : TWA 0.1 mg/m <sup>3</sup> ST 0.3 mg/m <sup>3</sup> [skin] <b>OSHA PEL</b> : TWA 0.1 mg/m <sup>3</sup> [skin]
<b>8.2 Exposure controls</b>	<b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. <b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

## Section 9. Physical and Chemical Properties

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

## Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight. Do not allow reagent to dry completely.
<b>10.5 Incompatible Materials</b>	Strong oxidizers. Strong reducers. Metals. Alkalis. Contact of picric acid with concrete floors may form friction sensitive salts.
<b>10.6 Hazardous Decomposition Materials</b>	Carbon Monoxide. Carbon Dioxide.

## Section 11. Toxicological Information

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

## Section 12. Ecological Information

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

## Section 13. Disposal Considerations

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

## Section 14. Transport Information

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	<b>DOT:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods.
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	<b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>DOT:</b> Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group</b>	<b>ADR/RID:</b> Not dangerous goods.

<b>DOT, IATA, IMDG, ADR</b>	IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

## Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>Other Regulations</b>	Picric acid is listed on SARA 313
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	Picric acid California Florida Massachusetts Minnesota New Jersey Pennsylvania Rhode Island
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
<b>R phrases</b>	<b>R4</b> EN: Forms very sensitive explosive metallic compounds. DA: Dannet meget følsomme eksplosive metalforbindelser. DE: Bildet hochempfindliche explosionsgefährliche Metallverbindungen. EL: Σχηματίζει πολύ ευαίσθητες εκρηκτικές μεταλλικές ενώσεις. ES: Forma compuestos metálicos explosivos muy sensibles. FR: Forme des composés métalliques explosifs très sensibles. IT: Forma composti metallici esplosivi molto sensibili. NL: Vormt met metalen zeer gemakkelijk ontplofbare verbindingen. PT: Forma compostos metálicos explosivos muito sensíveis. SV: Bildar mycket känsliga explosiva metallföreningar.
<b>S phrases</b>	<b>S28</b> 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)  <b>S35</b> EN: This material and its container must be disposed of in a safe way.

	<p>DA: Materialet og dets beholder skal bortskaffes på en sikker måde.  DE: Abfälle und Behälter müssen in gesicherter Weise beseitigt werden.  EL: Το υλικό και ο περιέκτης του πρέπει να διατεθεί με ασφαλή τρόπο.  ES: Elimínense los residuos del producto y sus recipientes con todas las precauciones posibles.  FR: Ne se débarrasser de ce produit et de son récipient qu'en prenant toutes précautions d'usage.  IT: Non disfarsi del prodotto e del recipiente se non con le dovute precauzioni.  NL: Deze stof en de verpakking op veilige wijze afvoeren.  PT: Não se desfazer deste produto e do seu recipiente sem tomar as precauções de segurança devidas.  SV: Produkt och förpackning skall oskadliggöras på säkert sätt.</p> <p><b>S37</b>  EN: Wear suitable gloves.  DA: Brug egnede beskyttelseshandsker under arbejdet.  DE: Geeignete Schutzhandschuhe tragen.  EL: Να φοράτε κατάλληλα γάντια.  ES: Usense guantes adecuados.  FR: Porter des gants appropriés.  IT: Usare guanti adatti.  NL: Draag geschikte handschoenen.  PT: Usar luvas adequadas.  SV: Använd lämpliga skyddshandskar.</p> <p><b>S45</b>  EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt.  DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).  EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό).  ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta).  FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette).  IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).  NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).  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**

<b>1.1 Product Identifier</b>	Product Name: Phosphomolybdic Acid Solution (0.2%) Product Number: SSC1198	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	Cancer Diagnostics, Inc.
	<b>Address</b>	116 Page Point Circle Durham, NC 27703
	<b>Phone Number</b>	1-877-846-5393
	<b>Fax Number</b>	1-877-817-1716
	<b>e-mail</b>	<a href="mailto:compliance@cancerdiagnostics.com">compliance@cancerdiagnostics.com</a>
	<b>Website</b>	<a href="http://www.cancerdiagnostics.com/sds">www.cancerdiagnostics.com/sds</a>

**Section 2. Hazards Identification**

<b>2.1 GHS Classification</b>	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H320	
<b>Classification: Directive 1999/45/EC</b>	 <b>Xi R36, R38, S24/25, S36/37/39</b> EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande  For full text of R- & S- phrases: see Section 15.	




<b>2.2 Label Elements</b>	Pictogram(s):   Signal word: Warning  Hazard statement(s): H315 – Causes skin irritation H320 – Causes eye irritation  Precautionary statement(s): P302+ P352 – IF ON SKIN: Wash with plenty of soap and water P305 + P351 – IF IN EYES: Rinse cautiously with water for several minutes. P337 + P313 – If eye irritation persists get medical advice/attention										
<b>NFPA</b> Scale: 0-4											
<b>HMIS (U.S.A.)</b> 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										
<b>2.3 Other Hazards</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.										

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

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

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
Phosphomolybdic Acid	51429-74-4	234-713-5	 Danger. 2 H272 May intensify fire; oxidizer. Danger. 1B H314 Causes severe skin burns and eye damage.	≤ 0.2

### Section 4. First Aid Measures

#### 4.1 Description of first aid measures

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

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

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

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

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

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

See section 2.2 and 11.

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

No data available

## Section 5. Fire Fighting Measures

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

## Section 6. Accidental Release Measures

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

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

**6.2 Environmental precautions**

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

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

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

## Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

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

Store in well ventilated area.

Keep container tightly closed.

Store at 15-30°C.

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

See section 1.2

## Section 8. Exposure Controls / Personal Protection

<b>8.1 Control parameters</b>	<b>Exposure Limits:</b> N/A
<b>8.2 Exposure controls</b>	<b>Personal Protective Equipment (PPE):</b> <b>Eye/Face protection.</b> Safety glasses or goggles are required. <b>Skin protection.</b> Protective clothing is required. <b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove.

	<b>Respiratory protection.</b> Avoid breathing vapor. <b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.
<b>Engineering Controls</b>	Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.

## Section 9. Physical and Chemical Properties

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

## Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Fire, static electricity, direct sunlight.
<b>10.5 Incompatible Materials</b>	Strong bases.
<b>10.6 Hazardous Decomposition Materials</b>	May release phosphorus oxides and molybdenum oxides under fire conditions.

## Section 11. Toxicological Information

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

## Section 12. Ecological Information

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

## Section 13. Disposal Considerations

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

## Section 14. Transport Information

<b>14.1 UN Number DOT, IATA, IMDG, ADR</b>	<b>DOT:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods.
<b>14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR</b>	<b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>DOT:</b> Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods.

	<b>IMDG:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group DOT, IATA, IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

## Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	Phosphomolybdic acid: Pennsylvania New Jersey
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
<b>R phrases</b>	<b>R36/38</b> EN: Irritating to eyes and skin. DE: Reizt die Augen und die Haut. FR: Irritant pour les yeux et la peau. IT: Irritante per gli occhi e la pelle. ES: Irrita los ojos y la piel.
<b>S phrases</b>	<b>S24/25</b> 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. IT: Evitare il contatto con gli occhi e con la pelle. ES: Evítese el contacto con los ojos y la piel.  <b>S37/39</b> 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: Usense guantes adecuados y protección para los ojos/la cara.

## 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**

<b>1.1 Product Identifier</b>	Product Name: Acetic Acid Solution (0.5%) Product Number: SSC1030	
<b>1.2 Intended use</b>	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.	
<b>1.3 Details of the supplier of the safety data sheet</b>	<b>Manufacturer</b>	Cancer Diagnostics, Inc.
	<b>Address</b>	116 Page Point Circle Durham, NC 27703
	<b>Phone Number</b>	1-877-846-5393
	<b>Fax Number</b>	1-877-817-1716
	<b>e-mail</b>	<a href="mailto:compliance@cancerdiagnostics.com">compliance@cancerdiagnostics.com</a>
	<b>Website</b>	<a href="http://www.cancerdiagnostics.com/sds">www.cancerdiagnostics.com/sds</a>

**Section 2. Hazards Identification**

<b>2.1 Classification: Regulation (EC) No 1272/2008 (CLP)</b>	Skin irritation (Category 2), H315 Eye Irritation (Category 2A), H319	
<b>Classification: OSHA 29 CFR 1910.1200 HCS</b>	Skin irritation (Category 2), H315 Eye Irritation (Category 2A), H319	
<b>Classification: Directive 1999/45/EC</b>		<b>Xi, S1/2, S26, S45</b> EN: Irritant DA: Lokalirriterende DE: Reizend EL: Ερεθιστικό ES: Irritante FR: Irritant IT: Irritante NL: Irriterend PT: Irritante SV: Irriterande  For full text of R- & S- phrases: see Section 15.



<b>2.2 Label Elements</b>	Pictogram(s):   Signal Word: Warning  Hazard Statement(s): H315 – Causes skin irritation 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.								
<b>NFPA</b> Scale: 0-4									
<b>HMIS (U.S.A.)</b> 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								
<b>2.3 Other Hazards</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.								

### Section 3. Composition and Information on Ingredients

#### 3.2 Chemical Description: Mixture

\*May contain additional non-hazardous proprietary ingredients.

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

Hazardous Ingredients:	CAS#	EC#	GHS Symbols	%
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.	≤ 0.5

### 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 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

<b>5.1 Extinguishing Media</b>	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
<b>5.2 Special hazards arising from the substance or mixture</b>	Carbon oxides.
<b>5.3 Advice for firefighters</b>	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

## Section 6. Accidental Release Measures

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

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

**6.2 Environmental precautions**

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

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

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

## Section 7. Handling and Storage

**7.1 Precautions for safe handling.**

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

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

Store in well ventilated area.

Keep container tightly closed.

Store at 15-30°C.

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

See section 1.2

## Section 8. Exposure Controls / Personal Protection

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

## Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Slight vinegar odor.
<b>Odor Threshold</b>	Unknown
<b>pH</b>	(1% soln/water): Neutral
<b>Melting Point/ Freezing Point</b>	0°C (32°F)
<b>Initial Boiling Point</b>	100°C (212°F)
<b>Flash Point</b>	Unknown
<b>Evaporation Rate</b>	(water=1): 1
<b>Flammability (solid, gas)</b>	Unknown
<b>Upper/Lower Flammability Limits</b>	Unknown
<b>Vapor Pressure</b>	(mmHg): 18 @ 20°C
<b>Vapor Density</b>	(Air = 1): Same as water.
<b>Relative Density</b>	Unknown
<b>Solubility(ies)</b>	Water
<b>Partition Coefficient: n-octanol/water</b>	Unknown
<b>Auto-Ignition Temperature</b>	Unknown
<b>Decomposition Temperature</b>	Unknown
<b>Viscosity</b>	1.222 mPa·s at 20°C
<b>Explosive Properties</b>	Not explosive.
<b>Oxidizing Properties</b>	Unknown

## Section 10. Stability and Reactivity

<b>10.1 Reactivity</b>	No relevant data available.
<b>10.2 Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>10.3 Possibility of Hazardous Reactions</b>	No hazardous reactions known.
<b>10.4 Conditions to Avoid</b>	Strong oxidizing agents, strong acids, strong bases.
<b>10.5 Incompatible Materials</b>	Reactive with strong oxidizing agents, reducing agents, metals, acids, and alkalis.
<b>10.6 Hazardous Decomposition Materials</b>	None known.

## Section 11. Toxicological Information

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

## Section 12. Ecological Information

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

## Section 13. Disposal Considerations

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

## Section 14. Transport Information

<b>14.1 UN Number DOT, IATA, IMDG, ADR</b>	<b>DOT:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods.
<b>14.2 UN Proper Shipping Name DOT, IATA, IMDG, ADR</b>	<b>ADR/RID:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>DOT:</b> Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods.

	<b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group DOT, IATA, IMDG, ADR</b>	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

## Section 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	Massachusetts: Acetic Acid CAS # 64-19-7 Pennsylvania: Acetic Acid CAS # 64-19-7 New Jersey: Acetic Acid CAS # 64-19-7
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
<b>R phrases</b>	
<b>S phrases</b>	<p><b>S1/2</b>            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><b>S26</b>            EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.            DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes.            DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren.            EL: Σε περίπτωση επαφής με τα μάτια πλύνετε τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή.            ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.            FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste.            IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico.            NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen.            PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista.            SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p>

	<p><b>S45</b>  EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt.  DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).  EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την 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

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