

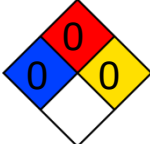


**Section 1. Identification**

<b>1.1 Product Identifier</b>	Product Name: Potassium Permanganate Solution (0.5%) Product Number: SSC1113-0.5	
<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">www.cancerdiagnostics.com</a>

**Section 2. Hazards Identification**

<b>2.1 GHS Classification</b>	Acute aquatic toxicity (Category 2) – H401 Chronic aquatic toxicity (Category 2) – H411	
<b>Classification: Directive 1999/45/EC</b>		<b>N: R22 R50/53; S2, S60, S61</b> EN: Dangerous for the environment DA: Miljøfarlig DE: Umweltgefährlich EL: Επικίνδυνο για το περιβάλλον ES: Peligroso para el medio ambiente FR: Dangereux pour l'environnement IT: Pericoloso per l'ambiente NL: Milieugevaarlijk PT: Perigoso para o ambiente SV: Miljöfarlig' For full text of R- & S- phrases: see Section 15.




<b>2.2 Label Elements</b>	Pictogram(s):   Signal Word: None Hazard Statement(s): H411 – Toxic to aquatic life with long lasting effects.  Precautionary statement(s): P273 – Avoid release to the environment								
<b>NFPA</b> Scale: 0-4									
<b>HMIS (U.S.A.)</b> Scale: 0-4	<table border="1"> <tr> <td>HEALTH</td> <td>0</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>C</td> </tr> </table>	HEALTH	0	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	C
HEALTH	0								
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	%
Potassium Permanganate	7722-64-7	231-760-3	 Danger. 2. H272 May intensify fire; oxidizer.  Warning. 4 H302 Harmful if swallowed.  Warning. 1. H400 Very toxic to aquatic life. 1. H410 Very toxic to aquatic life with long lasting effects.	≤ 0.5

## Section 4. First Aid Measures

### 4.1 Description of first aid measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with copious amounts of water 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

<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



8.1 Control parameters	<b>Exposure Limits:</b> N/A
8.2 Exposure controls	<p><b>Personal Protective Equipment (PPE):</b></p> <p><b>Eye/Face protection.</b> Safety glasses or goggles are required.</p> <p><b>Skin protection.</b> Protective clothing is required.</p> <p><b>Hand protection.</b> Chemical resistant gloves are required. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove.</p> <p><b>Respiratory protection.</b> Avoid breathing vapor.</p> <p><b>Environmental exposure controls.</b> Avoid releasing large quantities into the environment. No additional information.</p>
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 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

<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 reducing agents, Peroxides, Zinc, Copper
<b>10.6 Hazardous Decomposition Materials</b>	Carbon dioxide. Carbon monoxide. Oxides of Potassium. Oxides of Manganese.

## 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. <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> Potassium permanganate: LC50 – Oncorhynchus mykiss 0.3 – 0.6mg/L 96hr <b>Crustacea:</b> No relevant studies identified. <b>Algae/Aquatic Plants:</b> No relevant studies identified. <b>Other Organisms:</b> Potassium permanganate: EC50 – Daphnia magna 0.84mg/L 48hr
<b>12.2 Persistence and Degradability.</b>	No relevant studies identified.
<b>12.3 Bioaccumulative Potential.</b>	No relevant studies identified.
<b>12.4 Mobility in Soil.</b>	Miscible in water. May spread in water systems. This component is non-volatile.
<b>Additional Remarks</b>	None.
<b>12.5 Results of PBT and vPvB Assessment.</b>	<b>PBT:</b> This mixture does not contain any substances that are assessed to be a PBT. <b>vPvB:</b> This mixture does not contain any substances that are assessed to be a vPvB.

## Section 13. Disposal Considerations

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

**Section 14. Transport Information**

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: Not a DOT controlled product ADR/RID: 3082 IMDG: 3082 IATA: 3082
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate) IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium permanganate)
<b>14.3 Transport Hazard Class(es)</b>	IATA: 9 IMDG: 9 ADR/RID: 9
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: III IMDG: III IATA: III
<b>14.5 Environmental Hazards</b>	ADR/RID: Yes IMDG Marine pollutant: Yes IATA: Yes
<b>14.6 Special Precautions for User</b>	Not applicable.

**Section 15. Regulatory Information**

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.</b>	
<b>Extremely Hazardous Substances; Section 355</b>	None of the components in this mixture are listed.
<b>Toxic Substances Control Act; TSCA</b>	All of the components in this mixture are listed.
<b>California Proposition 65</b>	None of the components in this mixture are listed.
<b>Right To Know Components</b>	None of the components in this mixture are listed.
<b>15.2 Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by Cancer Diagnostics, Inc.
<b>R phrases</b>	<p><b>R22</b>            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.</p> <p><b>R50/53</b>            EN: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.            DA: Meget giftig for organismer, der lever i vand; kan forårsage uønskede langtidsvirkninger i vandmiljøet.            DE: Sehr giftig für Wasserorganismen, kann in Gewässern längerfristig schädliche Wirkungen haben.            EL: Πολύ τοξικό για τους υδρόβιους οργανισμούς, μπορεί να προκαλέσει μακροχρόνιες δυσμενείς επιπτώσεις στο υδάτινο περιβάλλον.            ES: Muy tóxico para los organismos acuáticos, puede provocar a largo plazo efectos negativos en el</p>

	<p>medio ambiente acuático.</p> <p>FR: Tres toxique pour les organismes aquatiques, peut entrainer des effets nefastes a long terme pour l'environnement aquatique.</p> <p>IT: Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico..</p>
<b>S phrases</b>	<p><b>S2</b></p> <p>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.</p> <p><b>S60</b></p> <p>EN: This material and its container must be disposed of as hazardous waste.          DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.          DE: Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen.          EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/ελτίο δεδομένων ασφαλείας.          ES: Elimínense el producto y su recipiente como residuos peligrosos.          FR: Eliminer le produit et son récipient comme un déchet dangereux.          IT: Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi.</p> <p><b>S61</b></p> <p>EN: Avoid release to the environment. Refer to special instructions/Safety data sheets.          DA: Undgå udledning til miljøet. Se særlig vejledning/leverandørbrugsanvisning.          DE: Freisetzung in die Umwelt vermeiden. Besondere Anweisungen einholen/Sicherheitsdatenblatt zu Rate ziehen.          EL: Αποφύγετε την ελευθέρωσή του στο περιβάλλον. Αναφερθείτε σε ειδικές οδηγίες/ελτίο δεδομένων ασφαλείας.          ES: Evítense su liberación al medio ambiente. Recábense instrucciones específicas de la ficha de datos de seguridad.          FR: Éviter le rejet dans l'environnement. Consulter les instructions spéciales/la fiche de données de securite.          IT: Non disperdere nell' ambiente. Riferirsi alle istruzioni speciali/ schede informative in materia di sicurezza.</p>

## Section 16. Other Information

**Revision Date:** 2019-01-11

### Notice to Reader:

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