# Safety Data Sheet (SDS)

<table>
<thead>
<tr>
<th>Revision Number: 1.1</th>
<th>Last updated: May2015</th>
</tr>
</thead>
</table>

## 1. Product and Company Identification

**Product Name:** SensoLyte® Luminescent Peroxidase Assay Kit *Luminometric*

**Manufacturer/Supplier:** AnaSpec, Inc.  
[www.anaspec.com](http://www.anaspec.com)  
34801 Campus Drive  
Fremont, CA 94555  
Tel: 510-791-9560  
Fax: 510-791-9572  
Email: service@anaspec.com

**Catalog Number**  
AS-72127

**Unit Size**  
1 kit

## 2. Hazards Identification

**Emergency Overview:**

**GHS Hazard Classification:**

**GHS Physical Hazards**

- **Component A:** 2A: Serious Eye Damage/Irritation  
  2: Skin Corrosion/Irritation
- **Component B:** Not applicable
- **Component C:** Not applicable
- **Component D:** Not applicable

**GHS Health and Environmental Hazards**

- **Component A:** Irritant to eyes and skin
- **Component B:** Not applicable
- **Component C:** Irritant to eyes and skin
- **Component D:** Irritant to eyes and skin

**GHS Signal Words:**

- **Component A:** Warning
- **Component B:** Not applicable
- **Component C:** Not applicable
- **Component D:** Warning

**GHS Hazard Statements:**

- **Component A:** H315+320: Causes skin and eye irritation.
- **Component B:** Not applicable
- **Component C:** H302 Harmful if swallowed.
- **Component D:** H316 Causes mild skin irritation. H320 Causes eye irritation
GHS Precautionary Statements:

**Component A:** P264: Wash hands thoroughly after handling.
P280: Wear eye protection / face protection.

**Component B:** P281: Use personal protective equipment as required.
P308+P313: If exposed or concerned: Get medical advice/attention.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of content/container in accordance with local regulations.

**Component C:** None

**Component D:** P280 Wear Eye Protection
   *If in eyes:* Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification:

<table>
<thead>
<tr>
<th>Component A:</th>
<th>Component B:</th>
<th>Component C:</th>
<th>Component D:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard: 1</td>
<td>Health hazard: 2</td>
<td>Health hazard: 2</td>
<td>Health hazard: 1</td>
</tr>
<tr>
<td>Flammability: 1</td>
<td>Flammability: 0</td>
<td>Flammability: 0</td>
<td>Flammability: 0</td>
</tr>
<tr>
<td>Physical hazards: 2</td>
<td>Physical hazards: 0</td>
<td>Physical hazards: 0</td>
<td>Physical hazards: 0</td>
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</tbody>
</table>

NFPA Rating:

<table>
<thead>
<tr>
<th>Component A:</th>
<th>Component B:</th>
<th>Component C:</th>
<th>Component D:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard: 1</td>
<td>Health hazard: 2</td>
<td>Health hazard: 2</td>
<td>Health hazard: 1</td>
</tr>
<tr>
<td>Fire: 0</td>
<td>Fire: 0</td>
<td>Fire: 0</td>
<td>Fire: 0</td>
</tr>
<tr>
<td>Reactivity hazard: 1</td>
<td>Reactivity hazard: 0</td>
<td>Reactivity hazard: 0</td>
<td>Reactivity hazard: 0</td>
</tr>
</tbody>
</table>

3. Composition / Information on Ingredients

**Ingredients/Components:**

<table>
<thead>
<tr>
<th>Chemical Name:</th>
<th>Description</th>
<th>CAS Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component A</strong></td>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
</tr>
<tr>
<td><strong>Component B</strong></td>
<td>5-amino-1,2,3,4-tetrahydrophthalazine-1,4-dione</td>
<td>521-31-3</td>
</tr>
<tr>
<td><strong>Component C</strong></td>
<td>Contains horseradish peroxidase</td>
<td>9003-99-0</td>
</tr>
<tr>
<td><strong>Component D</strong></td>
<td>Proprietary</td>
<td>N/A</td>
</tr>
</tbody>
</table>
4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Component A**

*Inhalation:* If a person inhales large amounts of the product move the exposed person to fresh air at once. If breathing is difficult or stops seek immediate medical attention.

*Ingestion:* Seek medical attention immediately. Never give an unconscious person anything by mouth.

*Skin:* If the product contacts the skin, immediately flush the contaminated skin with mild soap and water. If this chemical penetrates clothing immediately remove the clothing and flush the skin with water. Seek medical attention immediately.

*Eyes:* If the product contacts the eyes, promptly wash (irrigate) the eyes with large amounts of tepid water for at least 15 minutes, occasionally lifting the lower and upper lids. Seek medical attention immediately.

**Component B**

*Inhalation:* If a person inhales large amounts of the product move the exposed person to fresh air at once. If breathing is difficult or stops seek immediate medical attention.

*Ingestion:* Seek medical attention immediately. Never give an unconscious person anything by mouth.

*Skin:* If the product contacts the skin, immediately flush the contaminated skin with mild soap and water. If this chemical penetrates clothing immediately remove the clothing and flush the skin with water. Seek medical attention immediately.

*Eyes:* If the product contacts the eyes, promptly wash (irrigate) the eyes with large amounts of tepid water for at least 15 minutes, occasionally lifting the lower and upper lids. Seek medical attention immediately.

**Component C**

*Inhalation:* If breathed in, move person into fresh air. If not breathing, give artificial respiration.

*Ingestion:* Never give anything by mouth to an unconscious person. Rinse mouth with water.

*Skin:* Wash off with soap and plenty of water.

*Eyes:* Flush eyes with water as a precaution.

**Component D**

*Inhalation:* If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

*Ingestion:* Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

*Eyes:* Wash off with soap and plenty of water. Consult a physician.

*Skin:* Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
5. Fire Fighting Measures

**Extinguishing media:**
- **Component A and B:** Use extinguishing media appropriate for the surrounding fire. This product is compatible with commercially available extinguishing media.
- **Component C and D:** Use water spray, dry chemical or carbon dioxide.

**Special firefighting procedures:**
- **Component A and B:** This product does not require the use of any additional firefighting equipment beyond what is appropriate to the surrounding fire.
- **Component C and D:** Wear self-contained breathing apparatus (SCBA) if necessary.

**Unusual fire and explosions hazards:**
- **Component A, B and C:** No data available.
- **Component D:** Hazardous oxides of phosphorus, hydrogen chloride gas, potassium oxides and sodium oxides formed under fire conditions.

6. Accidental Release Measures

**Containment and spill response**
- **Component A:** Small Spills: Identify the spilled material(s). Barricade the spill area and notify others in the surrounding areas. Control all sources of ignition if the substance is flammable. Don the appropriate personal protective equipment. Control the movement of the spilled product (into drains, soil, across floors etc.) with absorbent spill materials. Collect contaminated spill material and place in container meeting appropriate U.N. packaging requirements. Decontaminate used equipment and affected spill area appropriately. Large Spills: In addition to small spill precautions, determine personnel evacuation distances. Notify appropriate authorities if necessary. Environmental Precautions: Collect and dispose of contaminated materials according to international, federal, state and local regulations. Keep away from surface and ground water, drains, and soil.

- **Component B:** Small Spills: Identify the spilled material(s). Barricade the spill area and notify others in the surrounding areas. Control all sources of ignition if the substance is flammable. Don the appropriate personal protective equipment (See section 8). Control the movement of the spilled product (into drains, soil, across floors etc.) with absorbent spill materials. Collect contaminated spill material and place in container meeting appropriate U.N. packaging requirements. Decontaminate used equipment and affected spill area appropriately. Large Spills: In addition to small spill precautions, determine personnel evacuation distances. Notify appropriate authorities if necessary.

- **Component C:** N/A

- **Component D:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Do not let product enter drains. Keep in suitable, closed containers for disposal.

**PPE**
- Use personal protective equipment.

7. Handling and Storage

**Component A and B:** Handling: Seek appropriate training to safely handle this product under normal conditions. Use the recommended personal protective equipment to prevent chemical exposures. Wash hands with soap and water before eating, drinking, or touching common items (phone, computer, etc.) to prevent cross contamination. Use this product
with adequate ventilation.

**Component C and D:**
*Handling:* Avoid contact with skin and eyes.
*Storage:* Keep container tightly closed in a dry and well-ventilated place.

### 8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Engineering controls</th>
<th><strong>Component A and B:</strong> Normal Handling Conditions: General room ventilation is adequate for the use of this product. Emergency Response Conditions: Provide negative pressure ventilation.</th>
<th><strong>Component C and D:</strong> Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPE</strong></td>
<td><strong>Component A and B:</strong> Safety shower, eyewash stations, and hand washing equipment should be available close to the work area as needed.</td>
<td><strong>Component C and D:</strong> Not applicable.</td>
</tr>
</tbody>
</table>

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>7.4</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

<table>
<thead>
<tr>
<th><strong>Thermal Decomposition</strong></th>
<th><strong>Component A and B:</strong> Extreme temperatures.</th>
<th><strong>Component C and D:</strong> No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dangerous Products of Decomposition</strong></td>
<td><strong>Component A:</strong> Decomposes to water and oxygen.</td>
<td><strong>Component B:</strong> Carbon monoxide, carbon dioxide, nitrogen oxides.</td>
</tr>
<tr>
<td></td>
<td><strong>Component C and D:</strong> No data available</td>
<td></td>
</tr>
</tbody>
</table>

**Dangerous Reactions**

- **Component A:** Strong acids or bases, strong oxidizers, reducing agents, organic materials, dirt, rust, and many metals.
- **Component B:** Heating to decomposition temperature may produce carbon monoxide, carbon dioxide, nitrogen oxides.
- **Component C and D:** No data available

### 11. Toxicological Information

<table>
<thead>
<tr>
<th><strong>RTECS Number</strong></th>
<th><strong>Component A:</strong> MX0888000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Component B:</strong> TH8890060</td>
</tr>
<tr>
<td></td>
<td><strong>Component C and D:</strong> N/A</td>
</tr>
</tbody>
</table>

**Toxicity**

- Not applicable

**Health Hazards**

- No data available
### Potential Hazards

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component A</strong></td>
<td>Eye Irritation</td>
</tr>
<tr>
<td><strong>Component B</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>
| **Component C and D** | *Inhalation:* May be harmful if inhaled. Causes respiratory tract irritation.  
*Ingestion:* Harmful if swallowed.  
*Skin:* May be harmful if absorbed through skin. May cause skin irritation.  
*Eyes:* Causes eye irritation.  
*Aggravated Medical Condition:* Avoid contact with DMSO solutions containing toxic materials or materials with unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body. |

| Carcinogenicity:   | No data available                                |
| OSHA PEL Data      | No data available                                |
| ACGIH TLV Data     | No data available                                |

### 12. Ecological Information

No data available

### 13. Disposal Considerations

**Component A and B:**  
*Substance:* Dispose of unused contents in accordance with international, federal, state, and local regulations.  
*Contaminated Packaging:* Dispose of container in accordance with international, federal, state and local requirements.

**Component C and D:** N/A

Contaminated Packaging: Dispose of as unused product.

### 14. Transport Information: IATA Exempted quantities labeling

<table>
<thead>
<tr>
<th>UN Number</th>
<th>N/A</th>
</tr>
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<tbody>
<tr>
<td>Hazard Class</td>
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</tr>
<tr>
<td>Identification Number</td>
<td>N/A</td>
</tr>
<tr>
<td>Packing Group</td>
<td>N/A</td>
</tr>
<tr>
<td>Proper Shipping Name (DOT)</td>
<td>N/A</td>
</tr>
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</table>
### 15. Regulatory information

<table>
<thead>
<tr>
<th>California Proposition 65:</th>
<th>Not Listed</th>
</tr>
</thead>
</table>
| **US TSCA (Toxic Substance Control Act):** | **Component A:** Listed  
Component B: Not listed  
Component C: Not listed  
Component D: Not listed |
| **US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):** | **Component A:** Listed  
Component B: Not listed  
Component C: Not listed  
Component D: Not listed |
| **US SARA Title III** | **Component A:** 302 Extremely Hazardous  
Component B: Not listed  
Component C:  
SARA 302 components: N/A  
SARA 313 components: N/A  
SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard  
Component D:  
SARA 302 components: N/A  
SARA 313 components: N/A  
SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard |
| **US Clean Air Act:** | **Components A, B, C and D:**  
Listed under Hazardous Air Pollutants: Not listed  
Listed under Class 1 Ozone Depletors: Not listed  
Listed under Class 2 Ozone Depletors: Not listed |
| **US Clean Water Act:** | **Components A, B, C and D:**  
Listed under “Hazardous Substances”: Not listed  
Listed under “Priority Pollutants”: Not listed  
Listed under “Toxic Pollutants”: Not listed |

**US States: Right-to-Know: Listed in the following States:**

<table>
<thead>
<tr>
<th>Component A</th>
<th>Component B</th>
<th>Component C</th>
<th>Component D</th>
</tr>
</thead>
</table>
| N/A         | N/A         | Pennsylvania  
Revision Date  
N/A          | Pennsylvania  
Revision Date  
N/A          |
| N/A         | N/A         | New Jersey  
Revision Date  
N/A          | New Jersey  
Revision Date  
N/A          |
| N/A         | N/A         | Massachusetts  
Revision Date  
N/A          | Massachusetts  
Revision Date  
N/A          |
| N/A         | N/A         | N/A          | N/A          |
European/International Regulations:

<table>
<thead>
<tr>
<th></th>
<th>Component A</th>
<th>Component B</th>
<th>Component C</th>
<th>Component D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC EINICS</td>
<td>231-765-0</td>
<td>208-309-4</td>
<td>232-668-6</td>
<td>N/A</td>
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<td>EC Risk statements</td>
<td>N/A</td>
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<tr>
<td>WGK</td>
<td>1</td>
<td>N/A</td>
<td>3</td>
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<tr>
<td>Canada-DSL/NDSL</td>
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<td>Not listed</td>
<td>Listed</td>
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<tr>
<td>Canada-WHMIS</td>
<td>C, D2B</td>
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<td>N/A</td>
<td>N/A</td>
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<td>classification</td>
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<td>Canada-Canadian</td>
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<tr>
<td>Ingredient Disclosure List</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

16. Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.