# Safety Data Sheet (SDS)

## 1. Product and Company Identification

<table>
<thead>
<tr>
<th><strong>Product Name:</strong></th>
<th>SensoLyte® Rh110 Matriptase Activity Assay Kit <em>Fluorimetric</em></th>
</tr>
</thead>
</table>
| **Manufacturer/Supplier:** | AnaSpec, Inc.  
  www.anaspec.com  
  34801 Campus Drive  
  Fremont, CA 94555  
  Tel: 510-791-9560  
  Fax: 510-791-9572  
  Email: service@anaspec.com |
| **Catalog Number:** | AS-72241 |
| **Unit Size:** | 1 kit |

## 2. Hazards Identification

### Emergency Overview:

### GHS Hazard Classification:

**GHS Physical Hazards**

- **Component A and B:** Flammable liquid (Category 4)
- **Component C and D:** Skin irritation (Category 3), Eye irritation (Category 2B)
- **Component E:** None

**GHS Health and Environmental Hazards**

- **Component A, B, C and D:** Irritant to eyes and skin
- **Component E:** None

**GHS Signal Words:**

- **Component A, B, C and D:** Warning
- **Component E:** None

**GHS Hazard Statements:**

- **Component A and B:** H227 Combustible liquid
- **Component C and D:** H316 Causes mild skin irritation, H320 Causes eye irritation.  
  H335 May cause respiratory irritation.
- **Component E:** None

**GHS Precautionary Statements:**

- **Component D:** P264 Wash skin thoroughly after handling. P270 Do not eats, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection
- **All other components:** None
## HMIS Classification:

<table>
<thead>
<tr>
<th>Component A:</th>
<th>Component B:</th>
<th>Component C:</th>
<th>Component D:</th>
<th>Component E:</th>
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<tbody>
<tr>
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## NFPA Rating:

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## 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients/Components</th>
<th>Chemical Name</th>
<th>Description</th>
<th>CAS Number</th>
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</thead>
<tbody>
<tr>
<td>Component A</td>
<td>Contains DMSO</td>
<td>67-68-5</td>
<td></td>
</tr>
<tr>
<td>Component B</td>
<td>Contains DMSO</td>
<td>67-68-5</td>
<td></td>
</tr>
<tr>
<td>Component C</td>
<td>Matriptase, human recombinant</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Component D</td>
<td>Assay Buffer</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Component E</td>
<td>Leupeptin solution</td>
<td>103476-89-7</td>
<td></td>
</tr>
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</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 and B
**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

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

#### Component C and 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.

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

**Eyes:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### Component E
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** If breathed in, move person into fresh air.

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

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

**Eyes:** Flush eyes with water as a precaution.
5. Fire Fighting Measures

**Extinguishing media:**

Component A and B: For small fires, use dry chemical, or carbon dioxide. For large fires, use water spray from a safe distance.

Component C, D and E: Use water spray, dry chemical or carbon dioxide.

**Special firefighting procedures:**

Component A and B: Fire fighters should wear positive pressure self-contained breathing apparatus and full turnout gear.

Component C, D and E: Wear self-contained breathing apparatus if necessary.

**Unusual fire and explosions hazards:**

Component A and B: Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Hazardous carbon oxides and sulphur oxides formed under fire conditions.

Other Components: None

6. Accidental Release Measures

**Containment and spill response**

Component A and B: Immediately contact emergency personnel. Prevent further leakage or spillage if safe to do so. Avoid breathing vapors or mist. Remove all sources of ignition and provide ventilation. Collect with an electrically protected vacuum cleaner, by wet-brushing, or by absorbing with vermiculite, sand or earth, and place in appropriate container for disposal. Do not let material enter drains. Discharge into the environment must be avoided.

Component C and D: Do not let product enter drains. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**PPE**

Use personal protective equipment

7. Handling and Storage

**Component A and B:**

*Handling:* Wash thoroughly after handling. Remove and wash any contaminated clothing. Keep container tightly closed and avoid contact with eyes, skin, and clothing. Use with adequate ventilation and avoid ingestion and inhalation. Keep away from heat and flame.

*Storage:* Store in a tightly closed container away from moisture, heat, and flame. Store away from incompatible substances. Storage under a nitrogen blanket has been recommended.

**Component C,D and E:**

*Handling:* Avoid contact with skin and eyes.

*Storage:* Keep container tightly closed in a dry and well-ventilated place.
8. Exposure Controls / Personal Protection

**Engineering controls**
Component A and B: Facilities storing and using this material should be equipped with a safety shower and eyewash station. Adequate ventilation should also be present. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Other Components:** Not applicable.

**PPE**
Component A, B, C, D, and E:

*Respiratory System:* A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

*Skin and Body:* Wear appropriate work uniform or laboratory coat to prevent skin exposure.

*Hands:* Use chemical resistant, impervious gloves. Appropriate techniques should be used to remove potentially contaminated gloves.

*Eyes:* Wear chemical splash goggles (EN166)

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>
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<tr>
<td>Specific Gravity</td>
<td>Not determined</td>
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<tr>
<td>pH</td>
<td>Component D – 9.5</td>
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<tr>
<td>Boiling Point</td>
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<tr>
<td>Melting Point</td>
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<td>Flash Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Thermal Decomposition</th>
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</thead>
<tbody>
<tr>
<td>Dangerous Products of Decomposition</td>
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<tr>
<td>Dangerous Reactions</td>
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11. Toxicological Information

<table>
<thead>
<tr>
<th>RTECS Number</th>
<th>Component A and B: PV6210000</th>
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<tbody>
<tr>
<td><strong>Other Components:</strong></td>
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<tr>
<td><strong>Toxicity</strong></td>
<td>Component A and B contain DMSO.</td>
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<tr>
<td></td>
<td>For DMSO</td>
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<tr>
<td>Oral LD50</td>
<td>LD50 Oral - rat - 14,500 mg/kg</td>
</tr>
</tbody>
</table>

AnaSpec Inc.
34801 Campus Drive, Fremont, CA 94555
Toll-Free: 800-452-5530 ● Tel: 510-791-9560 ● Fax: 510-791-9573
Inhalation LC50  
LC50 Inhalation - rat - 4 h - 40250 ppm 
Dermal LD50  
LD50 Dermal - rabbit - > 5,000 mg/kg 
Other Components: Not Applicable

Health Hazards  
No data available

Potential Hazards  
Potential Health Effects  
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 Permissible Exposure Limit(PEL) Data  
No data available
ACGIH Threshold Limit Values (TLV)  
No data available

12. Ecological Information

For Dimethyl sulfoxide (DMSO) CAS-No. 67-68-5 (Component A and B contain DMSO)

Toxicity  
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h 
LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h 
Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia pulex (Water flea) - 27,500 mg/l 
Toxicity to algae EC50 - Lepomis macrochirus (Bluegill) - > 400,000 mg/l - 96 h 
Other Components: No data available

Components A, B, C, D and E  
Persistence and degradability  
No data available
Bioaccumulative potential  
No data available
Mobility in soil  
No data available
PBT and vPvB assessment  
No data available
Other adverse effects  
No data available

13. Disposal Considerations

The combustible material (Component A and B) may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging  
Dispose of as unused product.

14. Transport Information:

UN Number  
N/A
Hazard Class  
N/A
Packing Group  
N/A
Proper Shipping Name (DOT)  
N/A
### 15. Regulatory information

<table>
<thead>
<tr>
<th>California Proposition 65</th>
<th>N/A</th>
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</table>
| US TSCA (Toxic Substance Control Act) | **Component A, B, C and D:** Listed  
**Component E:** Not Listed |
| US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) | **Component A and B:** 261.33 8(d).  
**Component C, D and E:** N/A |
| US SARA Title III | **Component A and B**  
SARA 302 components: N/A  
SARA 313 components: N/A  
SARA 311/312 Hazards: Fire Hazard, Chronic Health Hazard  
**Component C, D and E**  
SARA 302 components: N/A  
SARA 313 components: N/A  
SARA 311/312 Hazards: N/A |
| US Clean Air Act | **Component A, B, C, D, and E**  
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, D, and E**  
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>
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<tbody>
<tr>
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<td>Pennsylvania Revision Date 2007-03-01 CAS 67-68-5</td>
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European/International Regulations:

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<td>EC EINECS</td>
<td>200-664-3</td>
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<td>EC Risk statements</td>
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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.