Safety Data Sheet (SDS)

Revision Number: 1.2	Last updated: April 2015

1. Product and Company Identification

Product Name:	SensoLyte [®] ADHP Peroxidase Assay Kit * <i>Fluorimetric</i> *
Manufacturer/Supplier:	AnaSpec, Inc.
	www.anaspec.com
	34801 Campus Drive
	Fremont, CA 94555
	Tel: 510-791-9560
	Fax: 510-791-9572
	Email: <u>service@anaspec.com</u>
Catalog Number	AS-71111
Unit Size	1 kit

2. Hazards Identification

<u>Emergency Overview:</u> GHS Hazard Classification:

GHS Physical Hazards

Component A: Flammable liquid (Category 4)

Component B: Oxidizing solids (Category 3), Skin corrosion (Category 1B), Serious eye damage (Category 1)

Component C: Not applicable

GHS Health and Environmental Hazards Component A and C: Irritant to eyes and skin Component B: Causes severe skin burns and eye damage GHS Signal Words: Component A and C: Warning Component B: Danger GHS Hazard Statements:

Component A: H227 Combustible liquid

Component B: H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage. Component C: H316 Causes mild skin irritation. H320 Causes eye irritation.

GHS Precautionary Statements:

Component A: None

Component B: P220 Keep/Store away from clothing/ combustible materials. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician.

Component C: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification:

Component A:	Component B:	Component C:
Health hazard: 0	Health hazard: 3	Health hazard: 1
Flammability: 2	Flammability: 0	Flammability: 0
Physical hazards: 0	Physical hazards: 1	Physical hazards: 0

NFPA Rating:

Component A:	Component B:	Component C:
Health hazard: 0	Health hazard: 3	Health hazard: 1
Fire: 2	Fire: 0	Fire: 0
Reactivity hazard: 0	Reactivity hazard: 1	Reactivity hazard: 0

3. Composition / Information on Ingredients

Ingredients/Compone	ents:	
Chemical Name:	Description	CAS Number:
Component A	Contains DMSO	67-68-5
Component B	Contains Urea hydrogen peroxide	124-43-6
Component C	Proprietary	NA

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 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 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:* Take off contaminated clothing and shoes immediately. 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. Continue rinsing eyes during transport to hospital.

Component C

- 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.

Extinguishing media:	Component A: For small fires, use dry chemical, or carbon dioxide. For large
	fires, use water spray from a safe distance.
	Component B, C:
	Use water spray, dry chemical or carbon dioxide.
Special firefighting procedures:	Component A: Fire fighters should wear positive pressure self-contained
	breathing apparatus and full turnout gear.
	Component B, C: Wear self-contained breathing apparatus (SCBA) if
	necessary.
Unusual fire and explosions hazards:	Component A: 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.
	Component B: Hazardous carbon oxides and nitrogen oxides (NOx) formed
	under fire conditions.
	Component C: Hazardous oxides of phosphorus, hydrogen chloride gas,
	potassium oxides and sodium oxides formed under fire conditions.

6. Accidental Release Measures

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-
hmuching on hy choosehing with vormicablite, and on company and place in appropriate
brushing, or by absorbing with vermiculite, sand or earth, and place in appropriate
container for disposal. Do not let material enter drains.
Component B: Use personal protective equipment. Avoid dust formation. Avoid
breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe
areas. Avoid breathing dust. Sweep up and shovel. Contain spillage, and then collect with
an electrically protected vacuum cleaner or by wetbrushing and place in container for
disposal. Keep in suitable, closed containers for disposal.
Component C: 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.
Use personal protective equipment
-

7. Handling and Storage

Component A:

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 B:

Handling: Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection. *Storage:* Keep container tightly closed in a dry and well-ventilated place. Air, light, and moisture sensitive.

Component C:

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	Component A and B: Facilities storing and using this material should be equipped with a safety
controls	shower and eyewash station. Adequate ventilation should also be present.
	Component C: Not applicable.
PPE	Component A and B
	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.
	Component C: Not applicable.

9. Physical and Chemical Properties

Physical State	Liquid
Odor	Not determined
Solubility in Water	Soluble
Specific Gravity	Not determined
pН	Component C $- 7.4$
Boiling Point	Not determined
Melting Point	Not determined
Flash Point	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined

10. Stability and Reactivity

Thermal Decomposition	Not applicable
Dangerous Products of Decomposition	Not applicable
Dangerous Reactions	Not applicable

11.Toxicological Information

RTECS Number	Component A: PV6210000	
	Component B: MX0900000	
	Component C: N/A	
Toxicity	Component A contains DMSO.	
-	For DMSO	
	Oral LD50	
	LD50 Oral - rat - 14,500 mg/kg	
	Inhalation LC50	
	LC50 Inhalation - rat - 4 h - 40250 ppm	
	Dermal LD50	
	LD50 Dermal - rabbit - $> 5,000 \text{ mg/kg}$	

	Component B:
	No data available
	Component C:
	No data available
Health Hazards	No data available
Potential Hazards	Potential Health Effects
	<i>Inhalation</i> : 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.
	<i>Eyes:</i> 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)	No data available
Data	
ACGIH Threshold Limit Values (TLV)	No data available

12. Ecological Information

For Dimethyl sulfoxide (DMSO) CAS-No. 67-68-5 (Component A contains 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

Component B and C

No data available

13. Disposal Considerations

For Dimethyl sulfoxide (DMSO) CAS-No. 67-68-5 (Components A)

This combustible material 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

California Proposition 65:	N/A		
US TSCA (Toxic Substance Control Act):	Component A and B: Listed		
	Component C : Not listed		
US CERCLA (Comprehensive Environmental	Component A : 261.33 8(d).		
Response, Compensation, and Liability Act:	Component B and C: Not listed		
US SARA Title III	Component A		
	SARA 302 components: N/A		
	SARA 313 components: N/A		
	SARA 311/312 Hazards: Fire Hazard, Chronic Health Hazard		
	Component B		
	SARA 302 components: N/A		
	SARA 313 components: N/A		
	SARA 311/312 Hazards: Reactivity Hazard, Acute Health		
	Hazard		
	Component C		
	SARA 302 components: N/A		
	SARA 313 components: N/A		
	SARA 311/312 Hazards: Acute Health Hazard, Chronic Healt		
	Hazard		
US Clean Air Act:	Component A, B, C		
	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		
	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:

Component A:	Component B:	Component C:
Pennsylvania	Pennsylvania	Pennsylvania
Revision Date	Revision Date	Revision Date
2007-03-01	1989-12-01	N/A
67-68-5		
New Jersey	New Jersey	New Jersey
Revision Date	Revision Date	Revision Date
2007-03-01	1989-12-01	N/A
67-68-5		
Massachusetts	Massachusetts	Massachusetts
N/A	N/A	Revision Date
		N/A

European/International Regulations:					
	Component A:	Component B:	Component C:		
EC EINICS	200-664-3	204-701-4	N/A		
EC Risk statements	36/37/38	N/A	N/A		
WGK	1	1	N/A		
Canada-	Listed	Not listed	Not listed		
DSL/NDSL					
Canada-	D2B	С, Е	N/A		
WHMIS classification					
Canada-	Listed	Listed	Not Listed		
Canadian Ingredient					
Disclosure List					

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.