Safety Data Sheet (SDS)

Revision Number: 1.1	*Last updated: May 2015*

1. Product and Company Identification

Product Name:	**SensoLyte® 520 BACE2 Assay Kit *Fluorimetric***
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-72225
Unit Size	1 kit

2. Hazards Identification

Emergency Overview:

GHS Hazard Classification:

GHS Physical Hazards

Component A: Flammable liquid (Category 2)
Component B: Flammable liquid (Category 2)
Component C: Skin irritation (Category 1), Eye irritation (Category 1)
Component D: Flammable liquid (Category 2)
Component E: N/A

GHS Health and Environmental Hazards

Component A: Irritant to eyes and skin
Component B: Irritant to eyes and skin
Component C: Irritant to eyes and skin
Component D: Irritant to eyes and skin
Component E: N/A

GHS Signal Words:

Component A: Warning
Component B: Warning
Component C: Warning
Component D: Warning
Component E: N/A

GHS Hazard Statements:

Component A: H227 Combustible liquid
Component B: H227 Combustible liquid
Component C: H316 Causes mild skin irritation, H320 Causes eye irritation.
H335 May cause respiratory irritation.

Component D: H227 Combustible liquid
Component E: N/A

GHS Precautionary Statements:

Component A: - None
Component B: - None
Component C: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Component D: -None.
Component E: -None

HMIS Classification:

Component A:	**Component B:**	**Component C:**	**Component D:**	**Component E:**
Health hazard: 0	*Health hazard:* 0	*Health hazard: 0*	*Health hazard: 0*	*Health hazard:* 0
Flammability: 2	*Flammability:* 2	*Flammability: 0*	*Flammability: 2*	*Flammability:* 0
Physical hazards: 0	*Physical hazards:* 0	*Physical hazards:* 0	*Physical hazards:* 0	*Physical hazards:* 0

NFPA Rating:

Component A:	**Component B:**	**Component C:**	**Component D:**	**Component E:**
Health hazard: 0	*Health hazard:* 0	*Health hazard: 0*	*Health hazard: 0*	*Health hazard:* 0
Fire: 2	*Fire:* 2	*Fire: 0*	*Fire: 2*	*Fire:* 0
Reactivity hazard: 0	*Reactivity hazard:* 0	*Reactivity hazard:* 0	*Reactivity hazard:* 0	*Reactivity hazard:* 0

3. Composition / Information on Ingredients

Ingredients/Components:

Chemical Name:	*Description*	*CAS Number:*
Component A	Contains DMSO	67-68-5
Component B	Contains DMSO	67-68-5
Component C	Proprietary	NA
Component D	Contains DMSO	67-68-5
Component E	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, B, D

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

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

Inhalation: If breathe d 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.

5. Fire Fighting Measures

Extinguishing media:	**Component A, B and D:** For small fires, use dry chemical, or carbon dioxide. For large fires, use water spray from a safe distance. **Component C and E:** Use water spray, dry chemical or carbon dioxide.
Special firefighting procedures:	**Component A, B and D:** Fire fighters should wear positive pressure self-contained breathing apparatus and full turnout gear. **Component C and E:** N/A
Unusual fire and explosions hazards:	**Component A, B and D:** 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 C and E:** N/A

6. *Accidental* Release Measures

Containment and spill response	**Component A, B and D:** Soak with inert absorbent material. Keep in suitable, closed container for disposal. Remove all source of ignition. Use spark-proof tools and explosion-proof equipment. **Component C and E:** 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. Ensure adequate ventilation.

7. Handling and Storage

Component A, B and D:

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 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, B, and D:** Facilities storing and using this material should be equipped with a safety shower and eyewash station. Use explosion-proof equipment. Adequate ventilation should also be present. **Component C and E:** Not applicable.
PPE	**Components 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

Physical State	Liquid
Odor	Not determined
Solubility in Water	Soluble
Specific Gravity	Not determined
pH	Component C – 4.0 Component D – 8.0
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: PV6210000 Component C: N/A Component D: PV6210000 Component E: N/A
Toxicity	*Component A, Component B and Component D contain 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 mg/kg *Component C and Component E* 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: C*auses eye irritation.
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, B and D 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

Components C and E

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

For Components A, B, C, D, and E

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: IATA Exempted quantities labeling

UN Number	N/A
Hazard Class	N/A
Identification Number	N/A
Packing Group	N/A
Proper Shipping Name (DOT)	N/A

15. Regulatory information

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

Component A:	**Component B:**	**Component C:**	**Component D:**	**Component E:**
Pennsylvania Revision Date 2007-03-01 CAS 67-68-5	Pennsylvania Revision Date 2007-03-01 CAS 67-68-5	Pennsylvania N/A	Pennsylvania Revision Date 2007-03-01 CAS 67-68-5	Pennsylvania N/A
New Jersey Revision Date 2007-03-01 CAS 67-68-5	New Jersey Revision Date 2007-03-01 CAS 67-68-5	New Jersey N/A	New Jersey Revision Date 2007-03-01 CAS 67-68-5	New Jersey N/A
Massachusetts N/A	Massachusetts N/A	Massachusetts N/A	Massachusetts N/A	Massachusetts N/A

European/International Regulations:

	Component A:	**Component B:**	**Component C:**	**Component D:**	**Component E:**
EC EINECS	200-664-3	200-664-3	N/A	200-664-3	N/A
EC Risk statements	36/37/38	36/37/38	36/37/38	36/37/38	36/37/38
WGK	1	1	0	1	1
Canada-DSL/NDSL	Listed	Listed	Not Listed	Listed	Not Listed
Canada-WHMIS classification	D2B	D2B	N/A	D2B	N/A
Canada-Canadian Ingredient Disclosure List	Listed	Listed	Not Listed	Listed	Not Listed

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.