Material Safety Data Sheet (MSDS)

Revision 1.1		Last updated: May 2015	
1. Product and Company Identific	cation		
Product Name:		© Green Pin1 Activity Assay Kit *Fluorimetric*	
Manufacturer/Supplier:	AnaSpec, I		
	www.anasp		
	34801 Cam		
	Fremont, C Tel: 510-79		
	Fax: 510-79		
Catalog Number		vice@anaspec.com	
Catalog Number Unit Size	AS-72240		
Unu Size	1 kit		
2. Hazards Identification			
Emergency Overview:			
GHS Hazard Classification:			
GHS Physical Hazards			
Component	Component A: Flammable liquid (Category 4)		
Component	B: Not Applica	able	
Component C: Not Applicable		ıble	
Component D: Not Applicat			
Component E: Flammable liquid (Category 4)			
GHS Health and Environmental Ha	zards		
GHS Health and Environmental Hazards Component A: Irritant to eyes and skin		es and skin	
Component B: Irritant to eyes and skin			
Component C: Irritant to eyes and skin			
Component C: Irritant to eyes and skin Component D: Irritants to eyes and skin			
Component E: Irritant to eyes and skin			
Component	L. HIIIaiii 10 Ey	es and skin	
GHS Signal Words:			
Component	_		
Component	Component B: N/A		
	Component C: N/A		
Component D: N/A Component E: Warning			
GHS Hazard Statements:			
	A: H227 Comb	nustible liquid	
-	Component A: H227 Combustible liquid Component B: H302 Harmful if swallowed		
Component	D. П302 Паfffi.	TUI II SWAIIUWCU	

Component C: H302 Harmful if swallowed Component D: H302 Harmful if swallowed. Component E: H227 Combustible liquid

GHS Precautionary Statements:

Component A: - None Component B: - None Component C: - None Component D: - None Component E: - None

HMIS Classification:

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

NFPA Rating:

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

3. Composition / Information on Ingredients

Ingredients/Components:

p			
Chemical Name:	Description	CAS Number:	
Component A	Contains DMSO	67-68-5	
Component B	Proprietary	NA	
Component C	Proprietary	NA	
Component D	Proprietary	NA	
Component E	Contains DMSO,	67-68-5	
_	Tannic acid	1401-55-4	

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

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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: 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 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: 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 E

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.

Extinguishing media:	Component A and E: For small fires, use alcohol resistant foam, dry	
	chemical, or carbon dioxide. For large fires, use water spray from a safe	
	distance.	
	Component C: Not applicable.	
	Component D: Not applicable	
Special firefighting procedures:	Component A and E: Fire fighters should wear positive pressure self-	
	contained breathing apparatus (SCBA) and full turnout gear.	
	Component C: Not applicable	
	Component D: Not applicable	
Unusual fire and explosions hazards:	Component A and E: 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: Not applicable.	
	Component D: Not applicable	

6. Accidental Release Measures

Containment and spill response	Component A and E: 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.
	Component C: Not applicable Component D: Not applicable
PPE	Use personal protective equipment

7. Handling and Storage

Component A and E

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: Not applicable Component D: Not applicable

8. Exposure Controls / Personal Protection

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

Component C: Not applicable Component D: Not applicable

9. Physical and Chemical Properties

Physical State	Liquid	
Odo	Not determined	
Solubility in Water	Soluble	
Specific Gravity	Not determined	
pН	Component B -7.5	
	Component C –3.0	
	Component D –7.5	
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 Informa	<u>tion</u>
RTECS Number	Component A: PV6210000
	Component B: NA
	Component C: NA
	Component D: NA
	Component E: NPV6210000
Toxicity	Component A and Component E 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
Health Hazards	No data available
Potential Hazards	Potential Health Effects
	Component A and E
	Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
	Ingestion Harmful if swallowed.

	Skin Harmful if absorbed through skin. Causes skin irritation.
	Eyes Causes eye irritation.
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** and **E** 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

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 Dimethyl sulfoxide (DMSO) CAS-No. 67-68-5 (Component A 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 Excempted quantities labeling		
UN Number	N/A	
Hazard Class	N/A	
Identification Number	N/A	
Packing Group	N/A	
Proper Shipping Name (DOT)	N/A	

California D						
California Proposition 65:			N/A			
JS TSCA (Toxic Sı	ubstance Control Ac	t):	Component A: Li	sted		
			Component B : Not Listed			
			Component C: No			
			Component D : No			
			Component E : Lis			
US CERCLA (Comprehensive Environmental Response,			Component A : 261.33 8(d)			
Compensation, and Liability Act:			Component B : Not listed			
			Component C: Not listed			
			Component D : N			
			Component E : 26			
US SARA Title III			Component A			
			SARA 302 components: N/A			
			SARA 313 compo			
				azards: Fire Hazard, Chronic Health Hazard		
			Component B			
			SARA 302 compo	onents: N/A		
			SARA 313 components: N/A			
			SARA 311/312 Hazards: N/A			
			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: N/A			
			Component E:			
			SARA 302 components: N/A			
			SARA 313 compo			
			SARA 311/312 Hazards: Fire Hazard, Chronic Health Hazard			
S Clean Air Act:			Component A, B, C, D, E			
				Listed under Hazardous Air Pollutants: Not listed		
				s 1 Ozone Depletors: Not listed		
				s 2 Ozone Depletors: Not listed		
JS Clean Water Act	<i>t</i> :		Components A, B	, C, D, E		
JS Clean Water Act	<i>t:</i>		Listed under "Hazar	dous Substances": Not listed		
JS Clean Water Act	t:		Listed under "Hazar Listed under "Price	dous Substances": Not listed prity Pollutants": Not listed		
IS Clean Water Acı	t:		Listed under "Hazar Listed under "Price	dous Substances": Not listed		
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US States: Right-to Component A: Pennsylvania Revision Date 2007-	o-Know: Listed in the Component B:	Component C:	Listed under "Hazar Listed under "Prid Listed under "Tox Listed under "Tox es: Component D:	dous Substances": Not listed prity Pollutants": Not listed ic Pollutants": Not listed Component E: Pennsylvania Revision Date 2007-		
US States: Right-to Component A: Pennsylvania Revision Date 2007- 03-01	o-Know: Listed in the Component B:	Component C: N/A	Listed under "Hazar Listed under "Prical Listed under "Tox Listed	dous Substances": Not listed prity Pollutants": Not listed ic Pollutants": Not listed Component E: Pennsylvania Revision Date 2007- 03-01		

European/International Regulations:

	Component A	Component B	Component C	Component D	Component E
EC EINICS	200-664-3	N/A	N/A	N/A	200-664-3
EC Risk	36/37/38	N/A	N/A	N/A	36/37/38
statements					
WGK	1	N/A	N/A	N/A	1
Canada-	Listed	Not listed	Not listed	Not listed	Listed
DSL/NDSL					
Canada-	D2B	N/A	N/A	N/A	D2B
WHMIS					
classification					
Canada-	Listed	Not Listed	Not Listed	Not 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.