Safety Data Sheet (SDS)

Revision Number: 1.1

Last updated: April 2015

1) Product and Compan Product Name:	y Identification AnaTag™ RPE Labeling Kit	
Manufacturer/Supplier:	AnaSpec, Inc.	
тапијастатет/заррнет.	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-72113	
Unit Size	1 kit	
2) Hazards Identification	<u>n</u>	
Emergency Overview:	<u> </u>	
GHS Hazard Classificatio	on:	
GHS Physical Hazards		
Component B	Acute toxicity, Oral (Category 5)	
-	Skin irritation (Category 2)	
	Eye irritation (Category 2A)	
	Specific target organ toxicity - single exposure (Category 3)	
Component G	Flammable liquid (Category 2)	
Other Components	None	
GHS Health and Environ	mental Hazards	
Component A	H316 Causes mild skin irritation	
-	H320 Causes mild eye irritation	
Component B	Target organ effect, toxic by ingestion, irritant	
Component C and F	Irritant to eyes	
Component G	Irritant to eyes and skin	
Other Components	None	
GHS Signal Words		
Component A, B,G,I	Warning	
Other Components	None	
GHS Hazard Statements:		
Component B	H303 May be harmful if swallowed, H315 Causes skin irritation,	
_	H319 Causes serious eye irritation	
Component G	H227 Combustible liquid	
Other Components	None	
GHS Precautionary State	ments:	
Component A	P280 Wear Eye Protection	
Component B	P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before	
	reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.	

	P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after				
	handling.				
	P270 Do not eat, drink or smoke when using this product.				
	P280 Wear protective gloves/ eye protection/ face protection.				
	P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.				
	P302 + P352 IF ON SKIN: Wash with plenty of soap and water.				
	P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable				
	for breathing.				
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water. Remove contact lenses, if present				
	and easy to do. Continue rinsing.				
Component I	P280 Wear Eye Protection				
Other Components	None				
HMIS Classification					

Component A: Component B:		Component C and F:	Component D and E:	Component G	Component H and I
Health hazard: 0	Health hazard: 2	izard: 2 Health hazard: 1 Health hazard: 0 Health hazard: 0 Health ha		Health hazard: 0	
Flammability: 0	Flammability: 1	Flammability: 1	Flammability: 0	Flammability: 0	Flammability: 0
Physical hazards: 0	Physical hazards: 0	Physical hazards: 0	Physical hazards: 0	Physical hazards: 0	Physical hazards: 0
NFPA Rating					
Component A: Component B: C		Component C and F:	Component D and E:	Component G	Component H and I
Health hazard: 0	Health hazard: 2	Health hazard: 1	Health hazard: 0	Health hazard: 0	Health hazard: 0
Fire: 0	Fire: 1	Fire: 1	Fire: 0	Flammability: 2	Flammability: 0
			Reactivity hazard: 0	Physical hazards: 0	

3) Composition / Information on Ingredients

Ingredients/Components:		
Chemical Name:	Description	CAS Number:
Component A	Activated R-PE	NA
Component B	DTT	3483-12-3
Component C	Spin Column	NA
Component D	Wash tube	NA
Component E	Collection tube	NA
Component F	Gravity column	NA
Component G	DMSO	67-68-5
Component H	NEM(Lyophilised)	128-53-0
Component I	Reaction Buffer	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.

All Components

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.
Shine and shorts of water of water of superson. 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 and B: Use water spray, alcohol-resistant foam, dry chemical or		
	carbon dioxide.		
	Component C and F: CO2, extinguishing powder or water spray. Fight larger fires		
	with water spray or alcohol resistant foam.		
	Component D and E : None		
	Component G: For small fires, use alcohol resistant foam, dry chemical, or carbon		
	dioxide. For large fires, use water spray from a safe distance.		
	Component H : None		
	Component I: Use water spray, alcohol-resistant foam, dry chemical or carbon		
	dioxide.		
Special firefighting procedures	S: Component B: Wear self-contained breathing apparatus (SCBA) if necessary.		
	Component G: Fire fighters should wear positive pressure self-contained breathing		
	apparatus (SCBA) and full turnout gear.		
	Other components: None		
Unusual fire and explosions ha	<i>izards:</i> Component B: Hazardous carbon oxides and sulphur oxides formed under fire		
	conditions.		
	Component G: 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 Measu	res		
Spill response	Component A and B: Keep in suitable, closed container for disposal. Do not let material enter		
	drains.		
	Component C and F: Wear protective equipment. Keep unprotected persons away.		
	Component D ,E and H: None		
	Component G: 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			
	let material enter drains		
	Component I : Keep in suitable, closed container for disposal. Do not let material enter drains.		
Containment	Keep in suitable, closed containers		
PPE	Gloves, lab coat, goggles		

7) Handling and Storage

Component A,B and I:

Handling: Avoid contact with skin and eyes.

Storage: Store in a tightly closed container in a dry place at -20C.

Component C and F:

Handling: Avoid contact with skin and eyes.

Storage: Store at room temperature

Component H:

Handling: Avoid contact with skin and eyes.

Storage: Store in a tightly closed container in a dry place at -20C.

Component G:

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 D and E:

Storage: Store at room temperature

8) Exposure Controls / Personal Protection
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Engineering controls	All components: Facilities storing and using this material should be equipped with a safety shower and		
	eyewash station. Adequate ventilation should also be present.		
PPE	Wear goggles, gloves and lab coat when handling this product		

9) Physical and Chemical Properties

Physical State	Liquid
Odor	Not determined
Solubility in Water	Soluble
Specific Gravity	Not determined
pН	Component I-7.3
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	Stable under recommended storage conditions
Dangerous Products of Decomposition	None
Dangerous Reactions	No dangerous reactions known.

11) Toxicological Information

RTECS Number	Component B : EK1612000
	Component G: PV6210000
	Other Components: NA
Toxicity	Component G: 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
	Other Components: NA
Health Hazards	May cause skin irritation.
	May cause eye irritation.
	May be harmful if inhaled.
	May be harmful if swallowed.
Potential Hazards	Not identified
Carcinogenicity:	Not listed by NTP, IARC, or OSHA
OSHA Permissible Exposure Limit (PEL) Data	Not identified
ACGIH Threshold Limit Values (TLV)	Not identified

<u>12) Ecological Information</u>

Component C and F: Water hazard class 1 (German Regulation): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Component G:

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

AnaSpec Inc. 34801 Campus Drive, Fremont, CA 94555 Toll-Free: 800-452-5530 • Tel: 510-791-9560 • Fax: 510-791-9573 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

Consult local, state, or national regulations for proper disposal.

14) Transport Information

Hazard Class

This substance is considered to be non-hazardous for transport

15. Regulatory information

California Proposition 65:	None
US TSCA (Toxic Substance Control Act):	All components: Not listed
US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act:	All components: Not listed
US SARA Title III	Component A
	SARA 302 components: N/A
	SARA 313 components: N/A
	SARA 311/312 Hazards: Chronic Health Hazard
	Component B
	SARA 302 components: N/A
	SARA 313 components: N/A
	SARA 311/312 Hazards: Acute Health Hazard
	Component C ,D E ,F and H
	SARA 302 components: N/A
	SARA 313 components: N/A
	SARA 311/312 Hazards: N/A
	Component G
	SARA 302 components: N/A
	SARA 313 components: N/A
	SARA 311/312 Hazards: Fire Hazard, Chronic Health Hazard
	Component I
	SARA 302 components: N/A
	SARA 313 components: N/A
	SARA 311/312 Hazards: Chronic Health Hazard

US Clean Air Act:	All Components	
	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:	All Components	
	Listed under "Hazardous Substances": Not listed	
	Listed under "Priority Pollutants": Not listed	
	Listed under "Toxic Pollutants": Not listed	
	Component E	
	Listed under "Hazardous Substances": 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 and F:	Component D, E and H:	Component G		
	Pennsylvania					
	Revision Date			Pennsylvania		
NA	CAS#16096-97-2	N/A	<i>N/A</i>	Revision Date 2007-03-01		
	New Jersey					
	Revision Date			New Jersey		
NA	CAS#16096-97-2	N/A	N/A	Revision Date 2007-03-01		
	Massachusetts					
N/A	N/A	N/A	N/A	N/A		

European/International Regulations:

^	Component A	Component B	Component C and F	Component D, E	Component G	
	and I	1		and H		
EC EINICS	NA	240-263-0	N/A	NA	200-664-3	
EC Risk statements	NA	36/37/3822	N/A	NA	36/37/38	
WGK	NA	N/A	1	NA	1	
Canada- DSL/NDSL	Not Listed	Not Listed	Not listed	Not Listed	Listed	
Canada- WHMIS classification	NA	D1B, D2B	D2B	NA	D2B	
Canada- Canadian Ingredient Disclosure List	Not Listed	Not listed	Not Listed	Not Listed	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.