

Safety Data Sheet (SDS)

<i>Revision Number: 1.1</i>	<i>Last updated: April 2015</i>
1) Product and Company Identification	
<i>Product Name:</i>	AnaTag™ BPE Labeling Kit
<i>Manufacturer/Supplier:</i>	AnaSpec, Inc. www.anaspec.com 34801 Campus Drive Fremont, CA 94555 Tel: 510-791-9560 Fax: 510-791-9572 Email: service@anaspec.com
<i>Catalog Number</i>	AS-72112
<i>Unit Size</i>	1 kit
2) Hazards Identification	
<i>Emergency Overview:</i>	
<i>GHS Hazard Classification:</i>	
<i>GHS Physical Hazards</i>	
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
<i>GHS Health and Environmental Hazards</i>	
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
<i>GHS Signal Words</i>	
Component A, B,G,I	Warning
Other Components	None
<i>GHS Hazard Statements:</i>	
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
<i>GHS Precautionary Statements:</i>	
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.

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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.
 P280 Wear Eye Protection
 None

Component I**Other Components****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	Health hazard: 1	Health hazard: 0	Health hazard: 0	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:	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	Reactivity hazard: 0	Reactivity hazard: 0	Reactivity hazard: 0	Physical hazards: 0	Physical hazards: 0

3) Composition / Information on Ingredients**Ingredients/Components:**

Chemical Name:	Description	CAS Number:
Component A	Activated B-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.

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

Eyes: Flush eyes with water as a precaution.

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5) Fire Fighting Measures	
<i>Extinguishing media:</i>	<p>Component A and B: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p> <p>Component C and F: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.</p> <p>Component D and E : None</p> <p>Component G: For small fires, use alcohol resistant foam, dry chemical, or carbon dioxide. For large fires, use water spray from a safe distance.</p> <p>Component H : None</p> <p>Component I: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p>
<i>Special firefighting procedures:</i>	<p>Component B: Wear self-contained breathing apparatus (SCBA) if necessary.</p> <p>Component G: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.</p> <p>Other components: None</p>
<i>Unusual fire and explosions hazards:</i>	<p>Component B: Hazardous carbon oxides and sulphur oxides formed under fire conditions.</p> <p>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.</p> <p>Other components: None</p>
6) Accidental Release Measures	
<i>Spill response</i>	<p>Component A and B: Keep in suitable, closed container for disposal. Do not let material enter drains.</p> <p>Component C and F: Wear protective equipment. Keep unprotected persons away.</p> <p>Component D ,E and H: None</p> <p>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 not let material enter drains</p> <p>Component I: Keep in suitable, closed container for disposal. Do not let material enter drains.</p>
<i>Containment</i>	Keep in suitable, closed containers
<i>PPE</i>	Gloves, lab coat, goggles
7) Handling and Storage	
<p>Component A,B and I: <i>Handling:</i> Avoid contact with skin and eyes. <i>Storage:</i> Store in a tightly closed container in a dry place at -20C.</p> <p>Component C and F: <i>Handling:</i> Avoid contact with skin and eyes. <i>Storage:</i> Store at room temperature</p> <p>Component H: <i>Handling:</i> Avoid contact with skin and eyes. <i>Storage:</i> Store in a tightly closed container in a dry place at -20C.</p> <p>Component G: <i>Handling:</i> 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. <i>Storage:</i> 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.</p> <p>Component D and E: <i>Storage:</i> Store at room temperature</p>	

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8) Exposure Controls / Personal Protection	
<i>Engineering controls</i>	All components: Facilities storing and using this material should be equipped with a safety shower and eyewash station. Adequate ventilation should also be present.
<i>PPE</i>	Wear goggles, gloves and lab coat when handling this product
9) Physical and Chemical Properties	
<i>Physical State</i>	Liquid
<i>Odor</i>	Not determined
<i>Solubility in Water</i>	Soluble
<i>Specific Gravity</i>	Not determined
<i>pH</i>	Component I-7.3
<i>Boiling Point</i>	Not determined
<i>Melting Point</i>	Not determined
<i>Flash Point</i>	Not determined
<i>Vapor Pressure:</i>	Not determined
<i>Vapor Density:</i>	Not determined
10) Stability and Reactivity	
<i>Thermal Decomposition</i>	Stable under recommended storage conditions
<i>Dangerous Products of Decomposition</i>	None
<i>Dangerous Reactions</i>	No dangerous reactions known.
11) Toxicological Information	
<i>RTECS Number</i>	Component B: EK1612000 Component G: PV6210000 Other Components: NA
<i>Toxicity</i>	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
<i>Health Hazards</i>	May cause skin irritation. May cause eye irritation. May be harmful if inhaled. May be harmful if swallowed.
<i>Potential Hazards</i>	Not identified
<i>Carcinogenicity:</i>	Not listed by NTP, IARC, or OSHA
<i>OSHA Permissible Exposure Limit (PEL) Data</i>	Not identified
<i>ACGIH Threshold Limit Values (TLV)</i>	Not identified
12) Ecological Information	
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	

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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

<i>Hazard Class</i>	This substance is considered to be non-hazardous for transport
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15. Regulatory information

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

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US Clean Air Act:	All Components <i>Listed under Hazardous Air Pollutants: Not listed</i> <i>Listed under Class 1 Ozone Depletors: Not listed</i> <i>Listed under Class 2 Ozone Depletors: Not listed</i>
US Clean Water Act:	All Components <i>Listed under "Hazardous Substances": Not listed</i> <i>Listed under "Priority Pollutants": Not listed</i> <i>Listed under "Toxic Pollutants": Not listed</i> Component E <i>Listed under "Hazardous Substances": Listed</i> <i>Listed under "Priority Pollutants": Not listed</i> <i>Listed under "Toxic Pollutants": Not listed</i>

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
NA	Pennsylvania Revision Date CAS#16096-97-2	N/A	N/A	Pennsylvania Revision Date 2007-03-01
NA	New Jersey Revision Date CAS#16096-97-2	N/A	N/A	New Jersey Revision Date 2007-03-01
N/A	Massachusetts N/A	N/A	N/A	N/A

European/International Regulations:

	Component A and I	Component B	Component C and F	Component D, E and H	Component G
EC EINICS	NA	240-263-0	N/A	NA	200-664-3
EC Risk statements	NA	36/37/38--22	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.

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