

Safety Data Sheet (SDS)

<i>Revision Number: 1.0</i>	<i>Last updated: 10/04/2013</i>
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1. Product and Company Identification

<i>Product Name:</i>	SensoLyte® ONPG β -Galactosidase Assay Kit *Colorimetric*
<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>	72134
<i>Unit Size</i>	1 kit

2. Hazards Identification

Emergency Overview:

GHS Hazard Classification:

GHS Physical Hazards

- Component A:** None
- Component B:** None
- Component C:** None
- Component D:** None
- Component E:** Acute toxicity, Oral (Category 5)
Skin irritation (Category 2)
Eye irritation (Category 2A)

GHS Health and Environmental Hazards

- Component A:** H316 Causes mild skin irritation
H320 Causes mild eye irritation
- Component B:** H316 Causes Mild Skin Irritation
H320 Causes Mild Eye Irritation
- Component C:** Irritant to eyes and skin
- Component D:** Irritant to eyes and skin
- Component E:** Irritant to eyes, skin and respiratory system

GHS Signal Words:

- Component A:** Warning
- Component B:** Warning
- Component C:** Danger
- Component D:** Warning
- Component E:** Warning

GHS Hazard Statements:

Component A: None

Component B: H302 Harmful if swallowed.

Component C: H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Component D: H319

Component E: H303 May be harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

GHS Precautionary Statements:

Component A: P280 Wear Eye Protection

Component B: None

Component C: -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.

P271 Use only outdoors or in a well-ventilated area.

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 for several minutes.

Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P330 Rinse mouth.

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

Component D: None

Component E: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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HMIS Classification:

Component A:	Component B:	Component C:	Component D:	Component E:
<i>Health hazard: 1</i>	<i>Health hazard: 0</i>	<i>Health hazard: 0</i>	<i>Health hazard: 2</i>	<i>Health hazard: 2</i>
<i>Flammability: 0</i>	<i>Flammability: 0</i>	<i>Flammability: 0</i>	<i>Flammability: 0</i>	<i>Flammability: 0</i>
<i>Physical hazards: 0</i>	<i>Physical hazards: 0</i>	<i>Physical hazards: 0</i>	<i>Physical hazards: 0</i>	<i>Physical hazards: 0</i>

NFPA Rating:

Component A:	Component B:	Component C:	Component D:	Component E:
<i>Health hazard: 1</i>	<i>Health hazard: 0</i>	<i>Health hazard: 0</i>	<i>Health hazard: 2</i>	<i>Health hazard: 2</i>
<i>Fire: 0</i>	<i>Fire: 0</i>	<i>Fire: 0</i>	<i>Fire: 0</i>	<i>Fire: 0</i>
<i>Reactivity hazard: 0</i>	<i>Reactivity hazard: 0</i>	<i>Reactivity hazard: 0</i>	<i>Reactivity hazard: 0</i>	<i>Reactivity hazard: 0</i>

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

<i>Chemical Name:</i>	<i>Description</i>	<i>CAS Number:</i>
Component A	Contains Na ₂ HPO ₄	N/A
Component B	Contains dH ₂ O	N/A
Component C	Proprietary	N/A
Component D	Sodium Carbonate, Anhydrous, 10%	497-19-8
Component E	Dithiothreitol 15.4%	3483-12-3

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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: Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

Ingestion: Do NOT induce vomiting. If swallowed, wash out mouth with water if subject is conscious. Immediately consult a physician. Never give anything by mouth to an unconscious person.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. Consult a physician.

Eyes: Immediately flush eyes with large amount of water for at least 15 minutes. Consult a physician.

Component B

Inhalation: Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

Ingestion: Do NOT induce vomiting. If swallowed, wash out mouth with water if subject is conscious. Immediately consult a physician. Never give anything by mouth to an unconscious person.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. Consult a physician.

Eyes: Immediately flush eyes with large amount of water for at least 15 minutes. Consult a physician.

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: Remove to fresh air. If not breathing, give artificial respiration.

Ingestion: Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.

Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.

Component E

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. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

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5. Fire Fighting Measures

<i>Extinguishing media:</i>	Component A and E: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Component B, C and D: None
<i>Special firefighting procedures:</i>	Component E: Wear self contained breathing apparatus for fire fighting if necessary. Component A, B, C and D: None
<i>Unusual fire and explosions hazards:</i>	None

6. Accidental Release Measures

<i>Containment and spill response</i>	Component A and E: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Component B, C and D: None
<i>PPE</i>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

7. Handling and Storage**Component A and B:** Store at –20 °C**Component C:** Not Applicable**Component D:***Handling:* Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing.
Wash hands thoroughly after handling.*Storage:* Store in General Storage Area [Green Storage] with other items with no specific storage hazards.
Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.**Component E:***Handling:* U Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.*Storage:* Store at –20 °C, a cool, dry, well-ventilated, locked store room away from incompatible materials.**8. Exposure Controls / Personal Protection**

<i>Engineering controls</i>	Component A, B, C and D: None Component E: Safety shower and eye wash. Mechanical exhaust.
<i>PPE</i>	Component A, B and C : Wear goggles, gloves and lab coat when handling this product Component D: Wear goggles, gloves and lab coat when handling this product. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Component E: Wear goggles, gloves and lab coat when handling this product. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and Chemical Properties

<i>Physical State</i>	Liquid
<i>Odo</i>	Not determined
<i>Solubility in Water</i>	Soluble
<i>Specific Gravity</i>	Not determined
<i>pH</i>	7.5
<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>	Component A, B, C: Component D: Carbon monoxide, carbon dioxide, sulfur dioxides Component E: Bases, Oxidizing agents, Alkali metals, Reducing agents
<i>Dangerous Reactions</i>	No dangerous reactions known.

11. Toxicological Information

<i>RTECS Number</i>	Component A, B, C and E: N/A Component D: VZ4050000
<i>Toxicity</i>	Component D: <i>Acute Symptoms/Signs of exposure:</i> Eyes: Redness, tearing, itching, burning, conjunctivitis. Skin: Redness, itching. <i>Ingestion:</i> Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. <i>Inhalation:</i> Irritation of mucous membranes, coughing, wheezing, shortness of breath. Component A, B, C: Not identified Component E: <i>Eye Contact:</i> May cause irritation. <i>Skin Contact:</i> May cause irritation. <i>Ingestion:</i> Low toxicity. May cause nausea, headache or diarrhea. <i>Inhalation:</i> Unlikely at room temperature, inhalation of mist may cause irritation of respiratory tract.

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Health Hazards	May cause skin irritation. May cause eye irritation. May be harmful if swallowed May be harmful if absorbed through skin.
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 A and B: Do not allow product to reach ground water, watercourse, or sewage system. Component C, D and E: None	
<u>13. Disposal Considerations</u>	
Component A, B, C and D: Consult local, state, or national regulations for proper disposal. Component E: <i>Product:</i> Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.	
Contaminated packaging Dispose of as unused product.	
<u>14. Transport Information: IATA Exempted quantities labeling</u>	
UN Number	N/A
Hazard Class	3
Identification Number	N/A
Packing Group	N/A
Proper Shipping Name (DOT)	N/A

15. Regulatory information

California Proposition 65:	Not Listed				
US TSCA (Toxic Substance Control Act):	Component A: Not listed Component B: Not listed Component C: Not listed Component D: Listed Component E: Listed				
US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act:	Component A: Not listed Component B: Not listed Component C: Not listed Component D: Not listed Component E: Not listed				
US SARA Title III	Component A: Not listed Component B: Not listed Component C: Not listed Component D: Not listed Component E: Not listed				
US Clean Air Act:	Components 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				
US Clean Water Act:	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	
N/A	N/A	N/A	Pennsylvania CAS-No. 497-19-8	Pennsylvania CAS-No. 3483-12-3	
N/A	N/A	N/A	New Jersey CAS-No. 497-19-8	New Jersey CAS-No. 3483-12-3	
N/A	N/A	N/A	N/A	N/A	
European/International Regulations:					
	Component A	Component B	Component C	Component D	Component E
EC EINICS	N/A	N/A	N/A	207-838-8	2922-468-7
EC Risk statements	N/A	N/A	N/A	36	22-36/37/38
WGK	N/A	N/A	N/A	1	3

<i>Canada- DSL/NDL</i>	Not listed	Not listed	Not listed	Listed	Listed /Not listed
<i>Canada- WHMIS classification</i>	N/A	N/A	N/A	D2B	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
<i>Canada- Canadian Ingredient Disclosure List</i>	Not listed	Not 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.

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