

Doc No: 931-EK001-10KE Rev: A Date of Release: 16-Nov-2016

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

- a) GHS Product Identifier : Enzyme Powder Trypsin 4-Pack kit
- b) Other means of identification : Not available
- c) Product code : EK001-10KE
- d) Recommended use of the chemical and restrictions on use : Restricted for professional users.
- e) Supplier's details (including name, address, phone number etc.) : BioGenex Laboratories, Inc
49026 Millmont Drive
Fremont, CA 94538
- f) Emergency phone number : BioGenex: (01) (510) 275-0550
Chemtrec Assistance: (800) 424-9300 (U.S. and Canada only)
(01) (703) 527-3887 (all other countries)

2. HAZARD IDENTIFICATION

- a) GHS classification of the substance/mixture and any national or regional information: **HK052-5K (Trypsin)**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation : Category 2

Serious Eye Damage/Eye Irritation : Category 2

Respiratory Sensitization : Category 1

- b) GHS label elements, including precautionary statements :

LABELING:



SIGNAL WORD : DANGER

HAZARD STATEMENT(S)

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation

PRECAUTIONARY STATEMENT(S)

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

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

- c) Other hazards which do not result in the classification or are not covered by the GHS: Restricted to professional users.
None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

- a) Chemical identity : Mixture
b) Common name, synonyms, etc :
c) CAS number and other unique identifiers

Component Name	CAS No	EC No	Index-No.	Content	Classification
Trypsin	9002-07-7	232-650-8	647-010-00-7	100%	Skin Irrit. 2; Eye Irrit. 2; Resp. Sens. 1; STOT SE 3; H315, H319, H334, H335

4. FIRST AID MEASURES

Get medical aid immediately.

EYES: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do NOT allow victim to rub or keep eyes closed.

SKIN: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

INGESTION: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Call a poison control center.

INHALATION: Move the victim to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively. No specific antidote exists.

5. FIRE-FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Dry For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For larger fires, use water spray, fog or alcohol foam. Use agents suitable for type of surrounding fire.

FIREFIGHTING MEASURES: Firefighters should wear proper protective equipment and self-contained breathing apparatus (SCBA) with full facepiece operated in positive pressure mode. Move container from fire area if possible. Use water with caution and in flooding amounts. Dike fire control water for later disposal. Avoid breathing hazardous vapors; keep upwind.

SPECIFIC HAZARDS : In case of fire, toxic and corrosive gases may be formed. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours

6. ACCIDENTAL RELEASE MEASURES

- a) Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective equipment as specified in Section 8.

- b) Environmental precautions:
Do not allow material to enter drains.
- c) Methods and materials for containment and cleaning up.
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

- a) Precautions for safe handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- b) Conditions for safe storage, including any incompatibilities:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature -20 °C
Product is sensitive to light and moisture.
Storage class (TRGS 510): Non Combustible Solids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source..

Personal Protective Equipment

Eyes: Wear safety goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEKP2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

- a. Appearance Solid
- b. Odor Odorless
- c. Melting/Freezing Point (°C) NDA
- d. Boiling point (°C) NDA
- e. Flash Point (°C) NDA
- f. Vapor Density (Air = 1) NDA
- g. Relative Density NDA
- h. Water Solubility NDA

10. STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Incompatible products. Excess heat. Avoid dust formation.

INCOMPATIBLE MATERIALS : Strong Oxidizing Agents

DECOMPOSITION: Carbon monoxide, carbon dioxide.

HAZARDOUS POLYMERIZATION: None reported

11. TOXICOLOGICAL INFORMATION

- a) Information on the likely routes of exposure: Eyes, Oral, Dermal, Inhalation

b) Symptoms related to the physical, chemical and toxicological characteristics:

INHALATION: May cause respiratory tract irritation, leading to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. May cause liver and kidney damage, adverse central nervous system effects including headache, convulsions, and possible death, visual impairment and possible permanent blindness. May cause effects similar to those described for ingestion.

INGESTION: Causes gastrointestinal tract burns and severe pain, nausea, vomiting, diarrhea, and shock. May cause vascular collapse and damage and kidney and respiratory failure.

SKIN CONTACT: Causes skin burns. May be absorbed through the skin in harmful amounts. May cause deep, penetrating ulcers of the skin.

EYE CONTACT: Causes severe eye burns. May cause painful sensitization to light.

TARGET ORGANS: Kidneys, central nervous system, liver, cardiovascular system, eyes

c) Delayed and immediate effects and also chronic effects from short and long term exposure

NDA

d) Numerical measures of toxicity (such as acute toxicity estimates)

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component Name	CAS No	IARC	NTP.	ACGIH	OSHA
Trypsin	9002-07-7	Not Listed	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

a) Ecotoxicity (aquatic and terrestrial, where available): No data available.

b) Persistence and degradability : NDA

c) Bioaccumulative potential : NDA

d) Mobility in the soil : NDA

e) Other adverse effects : Not a PBT or PvB

13. DISPOSAL INFORMATION

Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

14. TRANSPORT INFORMATION

US DOT: Not regulated

IMDG/IMO: Not regulated.

IATA: Not regulated

TDG: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable.

SARA 311/312 Hazardous Categorization

Acute Health Hazard : Yes

Chronic Health Hazard : Yes

Fire Hazard : No

Sudden Release of Pressure Hazard : No

Reactive Hazard: No

16. Other information including information on preparation and revision of the SDS

Key abbreviations:

N/A

: Not Applicable

NDA

: No data available

Notice to reader

Each BioGenex SDS was developed to be used only with the corresponding BioGenex product. The information above is believed to be accurate and represents the best information currently available. We make, however, NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY,

EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. Users should make their own investigations to determine the suitability of the information for their particular purposes. BioGenex SDS's are not for resale.