

Doc No: 931- HK098-5K Rev: A Date of Release: 23-Aug-2016

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

- a) **GHS Product Identifier** : Tris Buffer Dried Powder
- b) **Other means of identification** : Not available
- c) **Product code** : HK098-5K
- 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: Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Not classified

Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments

- b) **GHS label elements, including precautionary statements** :

SIGNAL WORD : No Signal Word**Hazard statements** : No Known critical hazards**PRECAUTIONARY STATEMENTS****Prevention** : Not Applicable**Response** : Not Applicable**Storage** : Not Applicable**Disposal** : Not Applicable

- c) **Other hazards which do not result in the classification or are not covered by the GHS: Restricted to professional users.**

This product does not contain components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- a) **Chemical identity** : Mixture
- b) **Common name, synonyms, etc** : No Hazardous ingredient
- c) **CAS number and other unique identifiers**

Chemical Name	Synonyms	CAS No.	Percent	Einecs#
Tris(hydroxymethyl)aminomethane	Tris, Trizma	77-86-1	<50	Unlisted
Tris hydrochloride	Tris, Trizma	1185-53-1	<10	214-684-5

No other components need to be disclosed according to the applicable regulations.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

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

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Protective Equipment for Firefighters Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

Special Exposure Hazards Avoid inhalation of fumes, which may be toxic or irritating.

6. ACCIDENTAL RELEASE MEASURES

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

Wear appropriate protective equipment as specified in Section 8.

b) **Environmental precautions:**

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

c) **Methods and materials for containment and cleaning up.**

Cover with absorbent material (soda ash) to confine spill and sweep or shovel into container. Close container tightly. Avoid breathing vapors.

7. HANDLING AND STORAGE

a) **Precautions for safe handling:**

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Use explosion proof ventilation.

b) **Conditions for safe storage, including any incompatibilities:**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage.

Storage class (TRGS 510): Non Combustible Liquids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits : No exposure limit value known

Engineering Controls: Use in a well-ventilated area

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: None required where adequate ventilation conditions exist. .

9. PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance :** Dried powder

b. **Odor :** Odorless

c. **Odor Threshold :** NDA

d. **pH :** NDA

e. **Melting Point/Freezing Point (°C):** NDA

f. **Boiling point (°C):** NDA

g. **Flash Point (°C) :** NDA

h. **Evaporation Rate :** NDA

i. **Flammability :** NDA

j. **Upper/Lower Flammability or Explosive Limits :** NDA

k. **Vapor Pressure :** NDA

l. **Vapor Density (Air = 1) :** NDA

m. **Relative Density** NDA

n. **Water Solubility :** Soluble in water

o. **Partition Coefficient n-octanol/water :** NDA

p. **Autoignition Temperature (°C)** NDA

q. **Decomposition Temperature(°C) :** NDA

r. **Viscosity :** NDA

s. **Explosive Properties :** NDA

t. **Oxidizing Properties :** NDA

10. STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: NDA

MATERIALS TO AVOID : NDA

HAZARDOUS DECOMPOSITION PRODUCTS : Oxides of phosphorus, Hydrogen chloride gas, Sodium oxides

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: No known significant effects or critical hazards.

INGESTION: No known significant effects or critical hazards.

SKIN CONTACT: No known significant effects or critical hazards.

EYE CONTACT: No known significant effects or critical hazards.

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)

The toxicological properties have not been thoroughly investigated.

Toxicity data

CAS#	RTECS	LD50	CARCINOGENICITY					
			ACGIH	IARC	NIOSH	NTP	OSHA	Other
77-86-1	TY2900000	ORL-RAT: 5.9 gm/kg	No	No	No	No	No	None
1185-53-1	Unlisted	NDA	No	No	No	No	No	None

Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. Consult the actual entry in RTECS for complete information.

12. ECOLOGICAL INFORMATION

- a) Ecotoxicity (aquatic and terrestrial, where available): NDA
- b) Persistence and degradability : NDA
- c) Bioaccumulative potential : NDA
- d) Mobility in the soil : NDA.
- e) Other adverse effects : NDA

Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

13. DISPOSAL INFORMATION

Product

Disposal should be in accordance with applicable national, state, and local laws and regulations. Local regulations may be more stringent than national or state requirements. Verify local and state regulations before discharging into public sewers or landfills. Do not dump into any body of water. Contact a licensed professional waste disposal service for appropriate methods of disposal.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

US DOT: Not regulated.

IMO: Not regulated.

IATA: Not regulated.

RID/ADR: Not regulated.

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG : Not dangerous goods

IATA : Not dangerous goods.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment : Chemical safety assessment not carried out

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

Key abbreviations:

N/A	: Not Applicable
NDA	: No data available

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