Material Safety Data Sheet

Trypsin EDTA Solution A (0.25%), EDTA (0.02%),
with Phenol Red.

Section 1 - Product and Company Identification

1.1 Product Name: Trypsin EDTA Solution A (0.25%), EDTA (0.02%), with Phenol Red.

1.2 Catalog Number: 03-050-1

1.3 Synonyms: Not Applicable.

1.4 Product Use: Trypsin EDTA Solution is a pancreatic serine protease (Proteolytic) enzyme with specificity for peptides bonds. It is the most commonly used enzyme for cell harvesting in cell culture. Trypsin from Biological Industries is gamma irradiated before entering the production plant..

Available Sizes/ Quantities: (A) 500ml or (B) 100ml.

1.5 Manufacturer/Supplier: Biological Industries Israel Beit Haemek Ltd.
Kibbutz Beit Haemek, 25115, Israel.

1.6 Emergency Phone number: +972-(0)4-9960595

Section 2 - Composition / Information on Ingredients

2.1

Ingredient	Unit	CAS #	EC #
Trypsin[1,2] EDTA Solution A (0.25%) EDTA (0.02%), with Phenol Red.	Not Available	None	None

[1]Trypsin has been extracted and produced for porcine pancreas. It was done under veterinary inspection.

[2]Trypsin was gamma irradiated (25 kGy) before use as raw material. It was checked and found to be free from Salmonella, porcine parvovirus and mycoplasma.

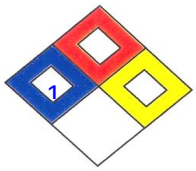
2.2 Form: Red Frozen Solution.

2.3 Use of Substance: For research and development or *In Vitro Diagnostic* use only.
Not for therapeutic use. Not for use on human subjects.

HMIS

Health	1	
Flammability	0	
Reactivity	0	
Personal Protection		

NEPA



2.4 Precautionary Measures to Minimize Risks and Potential Hazards:

- **2.4.1** Work according to Internationally Accepted Safety Standards and Protocols.
- **2.4.2** Do not handle the product until all safety precautions have been read and understood.
- **2.4.3** Read the product labels and/or product insert.
- **2.4.4** Do the necessary Personal Protection Equipment as required before coming in to contact with the product.
- **2.4.5** Keep away from heat/hot surfaces/sparks/open flames. No Smoking.
- **2.4.6** Use explosion-proof electrical/lighting/ventilation equipment.
- **2.4.7** Use only in well-ventilated areas.
- **2.4.8** Dispose of any chemical residues, spills or accompanying waste properly.
- **2.4.9** Contaminated equipment disposal as per protocols.
- **2.4.10** Wash hands thoroughly after handling.

Section 3 - Hazards Identification

3.1	**Emergency Overview:**	This product may be a potential irritant to eyes, respiratory system, and skin. This product may also be harmful if ingested. Complete toxicological properties have yet to be determined.
3.2	**Routes of Exposure:**	Absorbed through skin, eye contact, inhalation, and ingestion.
3.3	**Potential Health Effects:**	
	3.3.1 Eye:	May cause eye irritation.
	3.3.2 Skin:	May cause skin irritation.
	3.3.3 Inhalation:	May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
	3.3.4 Ingestion:	May be harmful if swallowed.
3.4	**Chronic Effects/Carcinogenicity:**	Not Available.
3.5	**OSHA Regulatory Status:**	Not Available.

Section 4 - First Aid Measures

4.1	**Eyes:**	In case of contact with eyes, flush thoroughly with water. Contact physician.
4.2	**Skin:**	In case of contact with skin, wash the affected area with copious amounts of water. Contact a physician.
4.3	**Ingestion:**	If swallowed, wash out mouth with water provided person is conscious. Contact physician.
4.4	**Inhalation:**	If inhaled, remove person to fresh air. If breathing becomes difficult, contact a physician.
4.5	**Puncture Wounds:**	Wash thoroughly with water. Allow to bleed freely. Contact physician.
4.6	**Note to Physician:**	Not Applicable.

Section 5 - Fire Fighting Measures

5.1	**Flash Point/Method:**	Not Available.
5.2	**Explosive Limits:**	
	5.2.1 Upper:	Not Available.
	5.2.2 Lower:	Not Available.
5.3	**Autoignition Temperature:**	Not Available.
5.4	**Hazardous Combustion Products:**	Not Available.
5.5	**Conditions of Flammability:**	Not Available.
5.6	**Extinguishing Media:**	Water spray, dry chemical powder, or appropriate foam.
5.7	**Fire Fighting Procedures:**	Not Available.
5.8	**Explosion Data:**	
	5.8.1 Sensitivity to Mechanical Impact:	Not Available.
	5.8.2 Sensitivity to Static Discharge:	Not Available.

Section 6 - Accidental Release Measures

6.1	**Leak and Spill Procedure:**	Wear chemical-resistant gloves. Absorb spill and place in closed container for disposal. Wash area thoroughly after clean-up is complete.

Section 7 - Handling and Storage

7.1	**Handling:**	Should be handled by trained personnel .
7.2	**Storage:**	Store at: -20 °C.

Section 8 - Exposure Controls/Personal Protections

8.1	**Engineering Controls:**	Use with adequate ventilation.
8.2	**Personal Protective Equipment:**	
	8.2.1 Respiratory Protection:	This is a laboratory-use product for which no industrial protective equipment has been designated.
	8.2.2 Eye Protection:	Safety glasses.
	8.2.3 Skin Protection:	Lab coat, gloves.
8.3	**General Hygiene Considerations:**	Wash hands after use.
8.4	**Exposure Limits:**	
	8.4.1 ACGIH TLV-TWA:	Not Available.
	8.4.2 OSHA PEL-TWA:	Not Available.

Section 9 - Physical/Chemical Properties

9.1	**Appearance:**	Clear Red Solution.
9.2	**Odor:**	Odorless.
9.3	**Physical State:**	Liquid.
9.4	**pH:**	7.35 – 7.5
9.5	**Boiling Point:**	Not Applicable
9.6	**Melting Point:**	Not Applicable.

9.7	**Freezing Point:**	Not Applicable
9.8	**Vapor Pressure:**	Not Available.
9.9	**Vapor Density:**	Not Available.
9.10	**Specific Gravity:**	Not Available.
9.11	**Evaporation Rate:**	Not Available.
9.12	**Solubility in Water:**	Not Available.
9.13	**Odor Threshold:**	Not Available.
9.14	**Coefficient of Water/Oil Distribution:**	Not Available.

Section 10 - Stability / Reactivity

10.1	**Chemical Stability:**	Stable.
10.2	**Conditions to Avoid:**	Not Available.
10.3	**Incompatibility (Material to Avoid):**	Not Available.
10.4	**Hazardous Decomposition/By-Products:**	Not Available.
10.5	**Hazardous Polymerization:**	Not Available.

Section 11 - Toxicological Information

11.1	**Effects of Short-Term Exposure:**	Not Available.
11.2	**Effects of Long-Term Exposure:**	Not Available.
11.3	**Irritancy of Product:**	Not Available.
11.4	**Sensitization to Product:**	Not Available.
11.5	**Carcinogenicity:**	Not Available.
11.6	**Reproductive Toxicity:**	Not Available.
11.7	**Teratogenicity and Embryotoxicity:**	Not Available.
11.8	**Mutagenicity:**	Not Available.
11.9	**Name of Toxicologically Synergistic Products:**	Not Available.
11.10	**LD50 (specify species and route):**	Not Available.
11.11	**LC50 (specify species):**	Not Available.

Section 12 - Ecological Information

12.1 Not Available.

Section 13 - Disposal Considerations

13.1	**Waste Disposal Method:**	Disposal should be in accordance with existing practices at your institution. Observe all federal, provincial, and local laws.

Section 14 - Transport Information

14.1	**Transport Canada**	
	14.1.1 PIN No.:	Not Available.
14.2	**U.S. Department of Transportation:**	
	14.2.1 Proper Shipping Name:	Not Available.

14.2.2 Hazard Class: This substance is not known to be hazardous for transport.

14.2.3 ID. Number: Not Available.

14.2.4 Packing Group: Not Available.

14.2.5 Label Statement: Not Available.

Section 15 - Regulatory Information

15.1 WHMIS Classification: Not Available.

15.2 Note: This MSDS was prepared according to Regulation (EC) No.1907/2006 and contains all the information required by these regulations.

Section 16 - Other Information

16.1 Prepared By: Quality Assurance.

16.2 Preparation Information: Refer to BI internal document center.

16.3 This MSDS has been revised in the following section(s): NA.

16.4 Original Issue Date: January 2012.

16.5 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Biological Industries Israel Beit Haemek Ltd. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Material Safety Data Sheet (MSDS) is current as of the Date Prepared shown in Section 16.4 of this document and may be subject to amendment by Biological Industries Israel Beit Haemek Ltd.

16.6 Disclaimer: THIS PRODUCT IS NOT FOR THERAPEUTIC APPLICATIONS.