



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product	Enzyme Mix
Chemical characterization	Buffered Enzyme Mix Solution
Supplier	Edge BioSystems 201 Perry Parkway, Suite 5 Gaithersburg, MD 20877 Tel: 1.301.990.2685 1.800.326.2685 Fax: 1.301.990.0881 www.edgebio.com
Emergency telephone number	1.800.326.2685
Product use	Component of a reagent for disrupting bacterial cells
Product Identification Number	N/A

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	Name	CAS Number	Weight %
	None		
Other components	Name	CAS Number	
	Water	7732-18-5	86 – 88
	Proprietary Enzymes	N/A	> 1%
	Tris-(hydroxymethyl) aminomethane	77-86-1	< 1%
	Ethylenediamine Tetraacetic Acid	60-00-4	< 1%
	Tris Hydrochloride	1185-53-1	< 1%

See Section 15 of this MSDS for OSHA Regulatory Status

3. HAZARDS IDENTIFICATION

Emergency overview	Clear, colorless liquid with no odor. Not expected to present a hazard. Will not burn. If involved in a fire, use extinguishing media suitable for the material that is burning.
Primary route(s) of entry	Eye and skin contact.
Symptoms of exposure	
Inhalation	None expected.
Eye contact	May cause slight irritation.

Skin contact None expected.

Ingestion May cause irritation to gastro-intestinal tract.

Medical conditions aggravated by exposure None known.

Listed as carcinogen or potential carcinogen Not listed by OSHA, the International Agency for Research on Cancer (IARC), or the National Toxicology Program (NTP)

4. FIRST AID

Eye contact Hold eye open and flush slowly and gently with plenty of water for several minutes. Remove any contact lenses, and continue flushing for several more minutes. Seek medical attention if irritation develops and persists. Clean contacts before reuse.

Skin contact Wash affected areas with plenty of water, and soap if available, for several minutes. Seek medical attention if irritation develops and persists.

Ingestion Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation None required under normal use conditions. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Note to physician The toxicological properties of this product have not been determined.

5. FIRE FIGHTING MEASURES

Flash Point and Method N/A

General hazard Does not present any special hazards.

Extinguishing media Use media suitable for the material that is burning.

Extinguishing media to avoid None

Special firefighting instructions Move containers from area if it can be done without risk.

Firefighting equipment As in any fire, wear NIOSH approved, positive-pressure, self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Wear appropriate protective equipment (See Section 8). Avoid contact with eyes and skin.

Environmental precautions No special precautions.

Clean-up methods Absorb with kitty litter, sawdust, soda ash, or sand. Sweep up and place in

a suitable container for disposal.

7. HANDLING AND STORAGE

Handling	Wear appropriate protective equipment (See Section 8). Avoid contact with eyes and skin. Use good laboratory practice. Wash thoroughly after handling.
Storage	Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	General ventilation.
Personal Protection	
Respirator	None required under normal use conditions.
Eye Protection	Wear safety glasses or vented safety goggles.
Gloves	Wear rubber gloves.
Clothing	Normal work clothing.
Other	Eye wash.
Exposure controls	N/E

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	None
Odor	None
Properties	pH: 8.0 Relative density (20°C): N/D Water solubility: Completely soluble

10. STABILITY AND REACTIVITY

Reactivity	Stable
Materials to avoid	Oxidizing and reducing agents.
Conditions to avoid	None known.
Hazardous decomposition products	None for product sold.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity No information available.

Chronic Toxicity No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity No information available.

Persistence/degradability No information available.

Movement/partitioning No information available.

13. DISPOSAL CONSIDERATIONS

RCRA hazardous waste code Not regulated

Special instructions Observe all federal, state and local laws and regulations.

14. TRANSPORT INFORMATION

DOT hazard class Not regulated

TDG hazard class Not regulated

15. REGULATORY INFORMATION

**OSHA regulatory status
(29 CFR 1910.1200)** Not hazardous

CERCLA reportable quantity (40 CFR 117, 302)	Name	Reportable quantity (lbs)	
	None	N/A	

SARA extremely hazardous substances (40 CFR 355)	Name	Threshold planning quantity (lbs)	Reportable quantity (lbs)
	None	N/A	N/A

**SARA hazard categories
(40 CFR 370)** None

SARA toxic chemicals (40 CFR 372)	Name	CAS Number	Percentage
	None	N/A	N/A

Inventory Status The chemicals in this product are either on the TSCA Chemical Substance Inventory and Canadian Domestic Substance List or are subject to the Research and Development exemption.

Toxic Substance Control Act	May only be used for research and development purposes in small quantities by, or under the direct supervision of, technically qualified persons in compliance with 40 CFR Section 720.36.
Controlled Products Regulations	This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.
WHMIS classification	Not a controlled product.

16. OTHER INFORMATION

Abbreviations	<p>C - Ceiling limit ERG – Emergency Response Guidebook LC₅₀ - The concentration of a substance in air that will kill 50% of test animals within a certain exposure period. LD₅₀ - The dose that causes death in 50% of test animals. N/A - Not applicable N/D - Not determined N/E - Not established N/K - Not known ERG - Emergency Response Guidebook RQ - Reportable Quantity TPQ - Threshold Planning Quantity WHMIS – Workplace Hazardous Materials Information System</p>
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Preparation information

Prepared by	Occupational Health & Safety Department
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Date prepared	January 19, 2006
Replaces	New

Disclaimer	The above information is believed correct, but does not purport to be all-inclusive and shall only be used as a guide. Edge BioSystems shall not be held liable for any damage resulting from handling or from contact with the above product.
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