

MATERIAL SAFETY DATA SHEET

Version	2.0	Issue Date 14 Jul 2011
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Supersedes	23 Mar 2010	American National Standard ANSI Z400.1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Product Name CATION-BUFFER SOLUTION (0.5 M MgSO₄ in 1 M TRIS)
Brand: Endosafe
Product Code BC1000

Intended Use R&D/Experimental use only

Manufacturer Charles River
Division Endotoxin and Microbial Detection
Address 1023 Wappoo Rd
 Suite 43-B
 Charleston, SC 29407

Telephone (843) 402 4900
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SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards Irritant, target organs effect
NFPA Rating Health = 1, Fire = 0, Instability = 0
HMIS Classification Health = 1, Flammability = 0, Physical hazards = 0

Potential Health Effects

Eyes May cause eye irritation
Skin May be harmful if absorbed through skin, causes skin irritation.
Inhalation May be harmful if inhaled, causes respiratory tract irritation.
Ingestion May be harmful if swallowed.
Target organs Central nervous system, Gastrointestinal tract

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	RTECS#	EC#	Concentration, %
Water	7732-18-5	ZC0110000	231-791-2	79.3
Tris (hydroxymethyl) aminomethane	77-86-1	TY2900000	201-064-4	3.5
Magnesium sulfate	7487-88-9	OM4500000	231-298-2	5.8
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride (1:1)	1185-53-1		214-684-5	11.4

SECTION 4: FIRST AID MEASURES

Eye contact	Flush eyes with plenty of water.
Skin contact	Rinse immediately with soap and plenty of water.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water
Inhalation	Move person into fresh air. If not breathing give artificial respiration.

SECTION 5: FIRE-FIGHTING MEASURES

Flash point	Not available
Ignition temperature	Not available
Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire fighting procedures	Wear self contained breathing apparatus for fire fighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid breathing vapors mist or gas.
Environmental precautions	Prevent product from entering drains.
Methods for cleaning	Keep in suitable, closed containers for disposal

SECTION 7: HANDLING AND STORAGE

Handling	Wear personal protective equipment and avoid contact with skin and eyes. Good laboratory technique should be used in handling product.
Storage	Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	Contains no substances with occupational exposure limit values
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection	Wear personal protective equipment and avoid contact with skin and eyes. Good laboratory technique should be used in handling product
Hygiene measures	Handle in accordance with good industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Clear liquid
Odor	Not available
pH	6.8 - 7.6 (1:10 dilution @ 20 – 25°)
Melting/freezing point	Not available
Boiling point	Not available
Flash point	Not available
Freezing point	Not available
Evaporation rate	Not available
Flammability	Not available
Upper/lower flammability limits	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Water solubility	Soluble
Partition coefficient: n octanol/water	Not available
Decomposition temperature	Not available
Viscosity	Not available

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Materials to avoid	Bases and oxidizers
Conditions to avoid	Excessive heat
Hazardous polymerization	Will not occur
Hazardous decomposition	Hazardous decomposition products formed under fire conditions include hydrogen chloride gas, and oxides of sulphur, magnesium, carbon and nitrogen (NO _x).

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity	Not available
Irritation and corrosion	Not available

Sensitization	Not available
Chronic exposure	Not available
IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Mutagenic effects	Not available
Reproductive toxicity	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Not available
Persistence/degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	Not available
Other adverse effects	Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Product	Observe all federal, state, and local environmental regulations
Contaminated packaging	Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT	Not regulated as hazardous material
IATA	Not regulated hazardous material
IMDG	Not regulated hazardous material

SECTION 15: REGULATORY INFORMATION

OSHA Hazards	Irritant, target organ effect
TSCA Status	All components are listed on the TSCA inventory.
SARA 302 Components	No components of this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards	No components of this material are subject to the reporting requirements of SARA Title III, Section 311/312.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
California Prop 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
DSL Status	All components of this product are on the Canadian DSL list.
WHMIS Classification	D2B (toxic materials causing other toxic effects) Moderate skin irritant Moderate respiratory irritant Moderate eye irritant

SECTION 16: OTHER INFORMATION

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Charles River Endosafe makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Charles River Endosafe be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature, are made hereunder with respect to information or the product to which the information refers.

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