

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Tris-Borate-EDTA buffer

TRADE NAME: TAE Buffer, 10X or 5X (Tris, Acetate, EDTA)

Cat# BM-260-BM-260A

COMPANY IDENTIFICATION: BOSTON BIOPRODUCTS, INC

9 SHORT STREET, WORCESTER, MA 01604

SECTION 3 - HAZARDS COMPONENTS

Chemical Name: Tris Base

Percent: 5-20%

CAS No.: 77-86-1

Molecular Weight: 121.14

Chemical Formula: H₂NC(CH₂OH)₃

Synonyms: TRIS; 2-Amino-2-(hydroxymethyl)-1,3-propanediol; THAM; Tromethamine (USP); Tris(hydroxymethyl) Aminomethane; Trisamine

Chemical Name: Boric acid

Chemical Name: Boric Acid

Percent: 5-20%

CAS No.: 10043-35-3

Molecular Weight: 61.83

Chemical Formula: H₃BO₃

Synonyms: borate

Chemical Name: EDTA

Percent: <1%

CAS No.: 139-33-3

Molecular Weight: 372.24

Chemical Formula: C₁₀H₁₄O₈N₂Na₂·2H₂O

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview: Can be harmful if swallowed or inhaled. Can cause irritation to skin, eyes and respiratory tract.

Potential Health Effects:

Inhalation: Inhalation of concentrated vapors can cause irritation or damage to the mucous membranes of the respiratory tract. Symptoms may include coughing, sneezing or difficulty breathing.

Ingestion: Can cause irritation and reddening to the mucous membranes of the mouth, esophagus and gastrointestinal tract if ingested in large enough quantities. Swallowing in large enough quantities can cause severe injury leading to death due to the Acetic acid content. Symptoms may include sore throat, nausea, vomiting and diarrhea.

Skin Contact: Causes irritation to skin. Symptoms include redness, itching and pain or inflammation upon prolonged contact.

Eye Contact: Causes irritation, redness and pain.

Chronic Exposure: Chronic dermatitis, darkening of skin, erosion of exposed front teeth and chronic inflammation of the mucous membranes of the respiratory tract may follow repeated and/or prolonged skin contact to large enough quantities.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of exposure to this solution.

SECTION 4-FIRST-AID MEASURES

AFTER INHALATION - If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT - In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT - In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION - If swallowed, wash out mouth with water provided person is conscious. Call a physician.

SECTION 5-FIRE FIGHTING MEASURES

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6-ACCIDENTAL RELEASE MEASURES

PROCEDURE(S) OF PERSONAL PRECAUTION(S) - Exercise appropriate precautions to minimize direct contact with skin or eyes.

METHODS FOR CLEANING UP - Mop up, place in waste disposal. Wash spill site after material pickup is complete.

SECTION 7-HANDLING AND STORAGE

HANDLING - Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE - Conditions of Storage: Keep tightly closed.

SECTION 8-EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS - Safety shower and eye bath.

GENERAL HYGIENE MEASURES - Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT - Hand Protection: Protective gloves. Eye Protection: Chemical safety goggles.

SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State: Liquid

Property Value At Temperature or Pressure

pH 7.4

BP/BP Range N/A

MP/MP Range N/A

Flash Point N/A

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density N/A

Decomposition Temp.

N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

SECTION 10-STABILITY AND REACTIVITY

STABILITY - Stable, Materials to Avoid:

HAZARDOUS DECOMPOSITION PRODUCTS - Hazardous Decomposition Products: No data

HAZARDOUS POLYMERIZATION - No data

SECTION 11-TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE - Skin Contact: May cause skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: May cause eye irritation. Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. Ingestion: May be harmful if swallowed.

SECTION 12- ECOLOGICAL INFORMATION

No data available.

SECTION 13-DISPOSAL CONSIDERATIONS

Observe all federal, state, and local environmental regulations.

SECTION 14-TRANSPORT INFORMATION

RID/ADR - Non-hazardous for road transport.

IMDG - Non-hazardous for sea transport.

Non-hazardous for air transport.

CONTACT BOSTON BIOPRODUCTS, INC. FOR TRANSPORTATION INFORMATION.

SECTION 15- REGULATORY INFORMATION

Data not Available

Disclaimer:

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