

Material Safety Data Sheet

Tris EDTA Buffer, 10 mM

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Section 1 – Product Description

Product Name: Tris EDTA Buffer, 10 mM

Recommended Use: Science education applications

Synonyms: 3-Aminophthalhydrazide, o-Aminophthaloyl hydrazide, o-Aminophthalyl hydrazide, 3-Aminophthalic hydrazide, 5-Amino-2,3-dihydro-1,4-phthalazinedione

Distributor: Biozoa Biological Supply Company, Seoul, Geumcheon-gu, Doosan-ro 70, B-1008(Hyundai-Center)

Chemical Information: 02-862-2372 (9am-5pm (ET) M-F)

Section 2 – Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.
No known OSHA hazards.

Section 3 – Composition / Information on Ingredients

Chemical Name	CAS #	%
Water	7732-18-5	99.8
Tris(Hydroxymethyl) Aminomethane	77-86-1	0.1
Ethylenedinitrillo Tetraacetic Acid, Free Acid (EDTA)	60-00-4	0.1

Section 4 – First Aid Measures

Emergency and First Aid Procedures:

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact: After contact with skin, wash immediately with plenty of water.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 – Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: None Known

Hazardous Combustion Products: Carbon oxides, Nitrogen oxides

Section 6 – Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Poses little or no immediate hazard Remove soiled clothing and launder before reuse. Avoid creating and inhaling spray or mist. Avoid contact with skin and eyes.

Absorb the liquid and scrub the area with detergent and water. Pick up wash liquid with additional absorbent and place in a disposable container.

Section 7 – Handling and Storage

Handling: Do not ingest or take internally.
Storage: Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

Section 8 – Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Not Normally Required

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Natural rubber, Neoprene, PVC or equivalent.

Section 9- Physical Data

Formula: See Section 3	Vapor Pressure: N/A
Molecular Weight: N/A	Evaporation Rate (BuAc=1): N/A
Appearance: Colorless Liquid	Vapor Density (Air=1): N/A
Odor: No data available	Specific Gravity: approx. 1
Odor Threshold: No data available	Solubility in Water: Soluble
pH: No data available	Log Pow (calculated): No data available
Melting Point: 0 C	Autoignition Temperature: No data available
Boiling Point: 100 C	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: 10
Flammable Limits in Air: N/A	Percent Volatile by Volume: 0%

Section 10- Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions

Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents, Water-reactive materials

Hazardous Decomposition Products: Nitrogen oxides, Carbon oxides

Hazardous Polymerization: Will not occur

Section 11 – Toxicity Data

Symptoms (Acute): No data available
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat		

Ethylenedinitrillo Tetraacetic Acid, Free Acid(EDTA) 60-00-4 90000 mg/kg Oral LD50 Rat 4500 mg/kg

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available		Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2
Chronic: Not listed as a carcinogen by IARC, NTP or OSHA., To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated.

Section 12- Ecological Date

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Ethylenedinitrillo Tetraacetic Acid, Free Acid(EDTA)	60-00-4	48 HR EC50 DAPHNIA MAGNA 113 MG/L [STATIC] 72 HR EC50 DESMODESMUS SUBSPICATUS 1.01 MG/L

Section 13 – Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 – Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by US DOT.
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 – Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Ethylenedinitrillo Tetraacetic Acid, Free Acid (EDTA)	60-00-4	No	5000 lb RQ	5000 lb final RQ; 2270 kg final RQ	No	No

Section 16 – Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Biozoa Biological Supply makes representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act

