Safety Data Sheet

REVISION: 02/28/2022

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Product Name: Tris Buffer, pH 7.0 [1M]
Catalog #: 10425, 10425-1

Company Identification

Cepham Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

Classification of the substance or mixture
Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition / Information on Ingredients

Mixtures
Synonyms: Tris Buffer substance
Tris(hydroxymethyl)aminomethane Buffer substance

Formula: C4H11NO3+HCl
Molecular Weight: 154.8 g/mol (average)

Hazardous components

Component	Classification	Concentration
Tris (hydroxymethyl) aminomethane		
CAS-No. 77-86-1 EC-No. 201-064-4 Registration Number: 01-2119957659-16-XXX		5-10%

SECTION 4: First Aid Measures

Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting Measures

Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
no data available

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling & Storage

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
hygroscopic Store under inert gas

Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Form: liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	7.0
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

Other safety information
No data available

SECTION 10: Stability & Reactivity

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
No data available

Conditions to avoid
No data available

Incompatible materials
Bases, Oxidizing agents

Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)
Inhalation: no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)
Dermal: no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
Eyes - rabbit (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)
Result: Mild eye irritation

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Not mutagenic in Ames Test. (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Carcinogenicity

IARC:	No component 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 component 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 component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Specific target organ toxicity - single exposure
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Additional Information
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

SECTION 12: Ecological Information

Toxicity
No data available

Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia - > 100 mg/l - 48 h (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)
Toxicity to algae	EC50 - other microorganisms - > 1,000 mg/l - 3 h (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Persistence and degradability

Biodegradability	Remarks: Readily biodegradable, according to appropriate OECD test.

Bioaccumulative potential
No data available

Mobility in soil
no data available (2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride)

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
no data available

SECTION 13: Disposal Considerations

Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport Information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory Information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: 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.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Tris (hydroxymethyl) aminomethane	CAS-No.	77-86-1	Revision Date
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride		1185-53-1	

New Jersey Right To Know Components

Tris (hydroxymethyl) aminomethane	CAS-No.	77-86-1	Revision Date
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride		1185-53-1	

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other Information

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

Disclaimer:
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.