

## SECTION 1: Product and Company Identification

### Identification of the substance or mixture

**Product Name:** STET-E1 Solution  
**Catalog #:** 10415, 10415-1

### Company Identification

Cepharm 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 in accordance with 29 CFR 1910 (OSHA HCS)

Not classified

### Hazards not otherwise classified (HNOC) or not covered by GHS

No information known.

### Label elements

**GHS label elements:** Not applicable  
**Hazard pictograms:** Not applicable  
**Signal word:** Not applicable  
**Hazard statements:** Not applicable  
**WHMIS classification:** Not controlled

### Classification system

#### HMIS ratings (scale 0-4)

#### (Hazardous Materials Identification System)

Health (acute effects): 0  
 Flammability: 0  
 Physical Hazard: 0

### Other hazards

#### Results of PBT and vPvB assessment

**PBT:** Not applicable.  
**vPvB:** Not applicable.

## SECTION 3: Composition / Information on Ingredients

Name	Common Name (Synonyms)	Product Identifier	%	GHS-US Classification
tris(hydroxymethyl)aminomethane	1,1,1-tris(hydroxymethyl)methylamine / 1,3-propanediol, 2-amino-2-(hydroxymethyl)- / 2-amino-2-(hydroxymethyl)-1,3-propanediol / 2-amino-2-(hydroxymethyl)propane-1,3-diol /	77-86-1	0.5 – 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

	2-amino-2-hydroxymethyl-1,3-propanediol / 2-amino-2-methylol-1,3-propanediol / addex-tham / aminotrimethylolmethane / aminotris(hydroxymethyl)methane / methanamine, 1,1,1-tris(hydroxymethyl)- / methylamine, 1,1,1-tris(hydroxymethyl)- / pehanorm / TALATROL / THAM / THAM set / THAM-E / trimethylolaminomethane / TRIS / tris (buffering agent) / tris amine buffer / TRIS AMINO / TRIS buffer / TRIS(base) / tris(hydroxymethyl)methanamine / tris(hydroxymethyl)methylamine / trisamin / trisamine / trisaminol / tris-hydroxymethylaminomethane / tris-hydroxymethylaminomethane / TRISPUFFER / TRIS-STERIL / TRIZMA / trometamol / trometamole / tromethamine / TROMETHANE / tromethanmin / tutofusin TRIS			
edetic acid	(ethylenedinitrilo)tetraacetic acid / 3,6-bis(carboxymethyl)3,6-diazaoctanedioic acid / 3,6-bis(carboxymethyl)edathamil / 3,6-diazaoctanedioic acid, 3,6-bis(carboxymethyl)- / 3,6-diazaoctanediol acid / acetic acid, (ethylenedinitrilo)tetra- / acetic acid, 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis- / Al3-17181 / caswell No 438 / celon A / celon ATH / cheelox / cheelox BF acid / chemcolox 340 / clewat TAA / complexon II / complexone II / detaric acid / edathamil / edetic / editic acid / EDTA / EDTA acid / EDTA, chelating agent / endrate / EPA pesticide chemical code 039101 / ethylenebis(iminodiacetic acid) / ethylenediamin tetracetic acid / ethylenediamine tetraacetic acid / ethylenediamine-N,N',N'-tetraacetic acid / ethylenediaminetetraacetate / ethylenedinitrilotetraacetic acid / gluma cleanser / glycine, N,N'-1,2-ethanedylbis(N-(carboxymethyl)- / hamp-ene acid / havidote / ICRF185 / idranal II / metaquest A / methaquest A / N,N'-1,2-ethanedylbis(N-(carboxymethyl)glycine) / N,N'-1,2-ethanedylbis(Ncarboxymethyl)glycine / NA9117 / nervanaid B acid / nullapon B acid / nullapon BF acid / perma kleer 50 acid / SEQ100 / sequestrene AA /	60-00-4	0.5 – 2	Eye Irrit. 2, H319

	sequestric acid / sequestrol / tetrine acid / titriplex / tricon BW / trilon B(=EDTA) / trilon BS / trilon BW / universne acid / versene acid / versene(=EDTA) / vinkeil 100 / warkeelate acid / YD30			
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## SECTION 4: First Aid Measures

### Description of first aid measures

First-aid measures after inhalation:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact:	Wash skin with plenty of water.
First-aid measures after eye contact:	Rinse eyes with water as a precaution.
First-aid measures after ingestion:	Call a poison center/doctor/physician if you feel unwell.

### Most important symptoms and effects, both acute and delayed

No additional information available

### Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Firefighting Measures

### Extinguishing media

#### Suitable extinguishing media

Water spray. Dry powder. Foam. Carbon dioxide.

### Special hazards arising from the substance or mixture

The product is non-reactive under normal conditions of use, storage and transport.

### Special protective equipment and precautions

Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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## SECTION 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Emergency procedures: Ventilate spillage area

#### For emergency responders

Protective equipment:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### Environmental precautions

Avoid release to the environment.

### Methods and materials for containment and cleaning up

Methods for cleaning up:	Take up liquid spill into absorbent material.
Other information:	Dispose of materials or solid residues at an authorized site.

### Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling & Storage

### Precautions for safe handling:

Precautions for safe handling:	Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### Conditions for safe storage, including and incompatibilities

Storage conditions:	Store in a well-ventilated place. Keep cool.
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## SECTION 8: Exposure Controls / Personal Protection

### Control parameters

tris(hydroxymethyl)aminomethane (77-86-1)	Not applicable
edetic acid (60-00-4)	Not applicable

### Appropriate engineering controls

Appropriate engineering controls:	Ensure good ventilation of the work station.
Environmental exposure controls:	Avoid release to the environment.

### Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

## 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	No data available
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

The product is non-reactive under normal conditions of use, storage and transport.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### Incompatible materials

No specific data

### Hazardous decomposition products:

Hazardous decomposition products.

## SECTION 11: Toxicological Information

### Information on toxicological effects

#### Acute toxicity

tris(hydroxymethyl)aminomethane (77-86-1)	
LD50 oral rat	5900 mg/kg (Rat)
ATE US (oral)	5900 mg/kg body weight

edetic acid (60-00-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
ATE US (oral)	> 5000 mg/kg body weight

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No effects known.

#### 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

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

## SECTION 12: Ecological Information

### Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Edetic acid (60-00-4)	
EC50 Daphnia 1	480-790 mg/l (EC50; 24h)
LC50 fish 2	159 mg/l (LC50; 96 h; Lepomis macrochirus)

### Persistence and degradability

tris(hydroxymethyl)aminomethane (77-86-1)	
Persistence and degradability	Biodegradability in water: no data available
Edetic acid (60-00-4)	
Persistence and degradability	Not readily biodegradable in water. Ozonation in the air. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.01 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.85 g O <sub>2</sub> /g substance
ThOD	1.09 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.0091

**Bioaccumulative potential**

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Log Pow	-1.56
Bioaccumulative potential	Bioaccumulation: not applicable
<b>Edetic acid (60-00-4)</b>	
BCF Fish 1	0.8 – 1.9 (BCF)
BCF other aquatic organisms 1	19 (BCF)
Log Pow	-5.01 - -3.34 (calculated)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)

**Mobility in soil**

No additional information available

**Other adverse effects**

Effect on the global warming: No known effects from this product.

GWPmix comment: No known effects from this product.

**SECTION 13: Disposal Considerations****Disposal methods**

Waste treatment methods: Waste treatment methods.

**SECTION 14: Transport Information****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**SECTION 15: Regulatory Information****US Federal Regulations**

<b>Tris (hydroxymethyl) aminomethane (77-86-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>edetic acid (60-00-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	5000 lb

**International regulations****CANADA**

tris(hydroxymethyl)aminomethane (77-86-1) Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

No additional information available

**National regulations**

No additional information available

**US State regulations**

No additional information available

**SECTION 16: Other Information****Full text of H-phrases:**

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

**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.