



# Bis-Tris Hydrochloride

## Safety Data Sheet

According to Regulation (EC) 1272/2008

### SECTION 1 - Chemical Product and Company Identification

#### 1.1 Product Identifiers

Product Name:	: Bis-Tris Hydrochloride
CAS #:	: 124763-51-5
EC #:	: 695-696-1
RTECS #:	: No information
REACH Registration Number	: No information

#### 1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical Manufacturing

#### 1.3 Supplier Details

**Supplier**  
BioSpectra, Inc.  
100 Majestic Way  
Bangor, PA 18013  
T: 610.599.3400  
ra@biospectra.us

#### 1.4 Emergency Numbers

Emergency number: US & Canada: 1-800-424-9300  
Outside the US & Canada: +1 703-527-3887

### SECTION 2 – Hazard Identification

#### 2.1 Classification of Substance or Mixture

Eye Irritation (Category 1)

#### 2.2 GHS Label Elements Including Precautionary Statements

Pictograms



Signal Word

: Warning

Hazard Statements

: H319 - Causes serious eye irritation

Precautionary Statement(s)

- : P260 – Do not breath dust/fumes/gas/mist/vapors/spray
- : P264 + 265 – Wash hands thoroughly after handling. Do not touch eyes.
- : P271 – Use only outdoors or in a well-ventilated area.
- : P280 – Wear protective clothing/productive gloves/eye protection/face protection.
- : P302 + P352 - IF ON SKIN: wash with plenty of water/soap.
- : P304 + P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing
- : P305 + P351: IF IN EYES: Rinse cautiously for several minutes with water. Remove contact lenses, if present and easy to do – keep rinsing.
- : P319: Get medical help if you feel unwell.
- : P337 + P317: If eye irritation persists: Get medical help.

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- P362 + P364: Take off contaminated clothing and wash it before reuse.
- P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
- P501: Dispose of container/contents according to local, state, and federal requirements.

### 2.3 Hazards not Classified or not Covered by the GHS

None

## SECTION 3 – Composition, Information on Ingredients

Component	Classification	Concentration
Bis-Tris Hydrochloride	Not Applicable	>99%

Synonyms	: Bis(2-hydroxyethyl)aminotris(hydroxymethyl)methane 2,2-Bis(hydroxymethyl)-2,2',2"-nitrilotriethanol 2-Bis(2-hydroxyethyl)amino-2-(hydroxymethyl)-1,3-propanediol
EC Number	: 695-696-1
CAS Number	: 124763-51-5
Molecular Formula	: C <sub>8</sub> H <sub>19</sub> NO <sub>5</sub> · HCl
Molecular Weight	: 245.70 g/mol

## SECTION 4 – First Aid Measures

### 4.1 Description of Necessary First Aid Measures

Eyes	: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.
Skin	: Wash off with soap and plenty of water.
Ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water.
Inhalation	: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician	: Treat symptomatically and supportively.

### 4.2 Most Important Symptoms/Effects, Acute and Delayed

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

### 4.3 Indication of Immediate Medical Attention and Special Treatment

No information available

## SECTION 5 - Firefighting Measures

### 5.1 Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

### 5.2 Specific Hazards Associated with this Chemical

Carbon Oxides, Nitrogen Oxides (NO<sub>x</sub>), Hydrogen chloride gas

### 5.3 Special Equipment/Precautions for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Other Information

None available

## SECTION 6 - Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Use proper personal protective equipment as indicated in Section 8.

### 6.2 Environmental Precautions

Do not let product enter drains.

### 6.3 Methods and Materials for Containment and Cleaning Up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Other Information

For disposal see section 13.

## SECTION 7 - Handling and Storage

### 7.1 Precautions for Safe Handling

#### Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

#### Hygiene measures

General industrial hygiene practice.

For precautions see section 2.2.

### 7.2 Conditions for Storage Including any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): 11: Combustible Solids

### 7.3 Other Information

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8 - Exposure Controls, Personal Protection

### 8.1 Control Parameters

Chemical does not contain any substances with occupational exposure limits.

### 8.2 Engineering Controls

General industrial hygiene practice.

### 8.3 Personal Protective Equipment

#### Eyes

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).Safety glasses.

#### Skin

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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

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Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Clothing

Wear appropriate 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.

### Respirators

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). Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system

### Control of environmental exposure

Do not let product enter drains

## SECTION 9 - Physical and Chemical Properties

Physical State	: Solid
Appearance	: White Crystalline
Odor	: No data available
pH	: 3.8-4.4 (1% at 25°C)
pK <sub>a</sub>	: No data available
Vapor Density	: No data available
Viscosity	: No data available
Melting Range	: No data available
Boiling Point	: No data available
Decomposition Temperature	: 170 deg C
Specific Gravity/Density	: No data available
Solubility	: 575 g/L
Molecular Formula	: C <sub>8</sub> H <sub>19</sub> NO <sub>5</sub> · HCl
Molecular Weight	: 245.70 g/mol

## SECTION 10 - Stability and Reactivity

### 10.1 Chemical Stability

Stable under normal temperatures and pressures.

## 10.2 Conditions to Avoid

Incompatible materials.

## 10.3 Incompatibilities with Other Materials

Strong oxidizing agents

## 10.4 Hazardous Decomposition Products

Carbon Oxides, Nitrogen Oxides (NOx)

## 10.5 Hazardous Polymerization

Will not occur.

# SECTION 11 - Toxicological Information

## 11.1 Toxicological Effects

LD50/LC50 Oral, rat	: Female 2000 mg/kg
LD50/LC50 Dermal, rat	: No data available
Carcinogenicity	: CAS# 124763-51-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA
Epidemiology	: No data available
Teratogenicity	: No data available
Reproductive Effects	: No data available
Neurotoxicity	: No data available
Mutagenicity	: No data available
Other Studies	: No data available

## 11.2 Additional Information

RTECS# : No information

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

# SECTION 12 - Ecological Information

## 12.1 Ecotoxicity

No data available

## 12.2 Persistence and Degradability

Biodegradability Result : aerobic-exposure time 28 days  
result 11.89% (CO2 evolution)

## 12.3 Bioaccumulative Potential

No data available

## 12.4 Mobility in Soil

No data available

## 12.5 Results of PBT and vPvB Assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other Adverse Effects

No information available

# SECTION 13 - Disposal Considerations

## 13.1 Disposal Methods

Dispose in a manner consistent with Federal, State and Local Regulations.

## SECTION 14 - Transport Information

Regulations	US DOT	IATA	IMDG	ADR/TDG
Shipping Name	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods
Hazard Class				
UN Number				
Packing Group				

## SECTION 15 - Regulatory Information

### 15.1 EHS Chemical Specific Regulations

#### SARA:

Section 302

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

Section 313

SARA 311/312 Hazards

#### STATE SPECIFIC:

Massachusetts Right To Know Components

- : No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

- : -Bis(2-hydroxyethyl)amino-2-(hydroxymethyl)-1,3-propanediol

New Jersey Right To Know Components

- : -Bis(2-hydroxyethyl)amino-2-(hydroxymethyl)-1,3-propanediol

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 - Additional Information

### 16.1 Hazard Ratings

NFPA Rating	
Health hazard	1
Fire Hazard	0
Reactivity Hazard	0

HMIS Classification	
Health hazard	1
Flammability	0
Physical Hazards	0

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