

Safety Data Sheet

#90005609 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	VERSION	REVISION DATE
Tris buffer (1 M) pH 7.4	77-86-1	10	29 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name Tris buffer (1 M) pH 7.4**CAS number** 77-86-1**EC / EINECS number** *Not applicable***UFI code** *Not applicable***Chemical formula** *Not applicable***Molecular weight** *Not applicable***SMILES** *Not applicable*

1.2 Relevant identified uses of the substance or mixture and uses advised against

For research use, laboratory use, manufacture of chemicals. Not suitable for human or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008.

2.2 Label elements

NONE

CODE	PRECAUTIONARY STATEMENT
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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2.3 Other hazards

Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients

3.2 Mixtures

COMPONENT 1

Name	Trometamol
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CAS number	77-86-1
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EC number	201-064-4
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Concentration	>1 - <12%
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Classification according to Regulation (EC) No 1272/2008	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335
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Hazard statements	H315, H319, H335
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COMPONENT 2

Name	2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride
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CAS number	1185-53-1
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EC number	214-684-5
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Concentration	>1 - <16%
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Classification according to Regulation (EC) No 1272/2008	Not classified
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Hazard statements	None
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SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move person into fresh air. If not breathing, give artificial respiration.
Skin contact	Wash off with soap and plenty of water.
Eye contact	Flush eyes with water as a precaution.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon oxides, Nitrogen oxides (NO_x)
Combustible

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Absorb spillage with a suitable absorbent material.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	Ambient
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Conditions for safe storage (incompatibilities)	Store at ambient temperature. Store in a dry place. Store in a closed container.
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7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL)	Not applicable
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DNEC/PNEC data	DNEC (Trometamol) Chronic effects systemic (Dermal)- 166.7 mg/kg bw/day Chronic effects systemic (Inhalation)- 117.5 mg/m ³ DNEC (2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride) Chronic effects systemic (Dermal)- 216.6 mg/kg bw/day Chronic effects systemic (Inhalation)- 152.8 mg/m ³ PNEC (Trometamol) Microorganisms in sewage treatment- 300 mg/L
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8.2 Exposure controls

Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Gloves: Nitrile Rubber, 0.11mm (480 mins).
Respiratory protection	Not required Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.
Other protection	<i>No data available</i>
Environmental exposure controls	<i>No data available</i>

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Liquid DERIVED FROM: LITERATURE
Colour	Colourless DERIVED FROM: LITERATURE
Odour	Odourless DERIVED FROM: LITERATURE
Melting / freezing point	<i>Not applicable</i>
Boiling point	<i>Not applicable</i>
Flammability	<i>Not applicable</i>
Lower and upper explosion limit	<i>Not applicable</i>
Flash point	<i>Not applicable</i>
Auto-ignition temperature	<i>Not applicable</i>
Decomposition temperature	<i>Not applicable</i>
pH	<i>Not applicable</i>
Acidity	<i>Not applicable</i>
Kinematic viscosity	<i>Not applicable</i>
Solubility	<i>Not applicable</i>
Partition coefficient n-octanol/water (log value)	<i>Not applicable</i>
Vapour pressure	<i>Not applicable</i>
Density (g/mL)	1 g/mL DERIVED FROM: LITERATURE
Relative vapour density	<i>Not applicable</i>

Particle characteristics*Not applicable*

9.2 Other information*No data available*

SECTION 10**Stability & reactivity****10.1 Reactivity***No data available*

10.2 Chemical stabilityStable under recommended storage conditions

10.3 Possibility of hazardous reactionsdata available

10.4 Conditions to avoid*No data available*

10.5 Incompatible materialsStrong oxidizing agents, strong acids

10.6 Hazardous decomposition productsSee section 5

SECTION 11**Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity (LD50 / LC50)** *Not applicable*

Skin corrosion / irritation *Not applicable*

Eye corrosion / irritation *Not applicable*

Respiratory / skin sensitisation *Not applicable*

Carcinogenicity *Not applicable*

Mutagenicity *Not applicable*

Reproductive toxicity *Not applicable*

STOT (single / repeated exposure) *Not applicable*

Aspiration hazard *Not applicable*

11.2 Information on other hazards*Not applicable*

SECTION 12

Ecological information

12.1 Toxicity

Not applicable

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance-specific regulations (e.g. licences)

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work.

REACH code Y113

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Replaces previous SDS ver. 1.0 published 1st November 2021.

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.