Safety data sheet

Tris Base

Product name Tris Base	Catalog no. TBS05, TBS10
Synonyms Tromethane; Tromethamine; TRIS; Trometamol	Revision date -
CAS no. 77-86-1	Format version / date 1.0 / 24 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Tris Base
Product code	TBS05, TBS10
CAS number	77-86-1
EC number	201-064-4
Recommended use	For research use only. Not intended for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP). Physical, health and environmental classification criteria are not met.
Label elements	No hazard labeling required.
Symbols / pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements – Prevention	None
Precautionary statements – Response	None
Other hazards	Not considered PBT or vPvB. No known or suspected endocrine disruptors.

Composition & response

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Tris Base
Synonyms	Tromethane; Tromethamine; TRIS; Trometamol
Concentration	>95%
Formula	C4H11NO3
Molecular weight	121.14 g/mol
Composition	Tris(hydroxymethyl)aminomethane (CAS 77-86-1; EC 201-064-4); content >95%.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do; continue rinsing.
Skin contact	Rinse affected skin with water. Seek medical advice if irritation persists.
Inhalation	Move to fresh air. Consult a physician if symptoms occur.
Ingestion	Rinse mouth. If feeling unwell, obtain medical advice.
Self-protection of first aider	Use personal protective equipment as required.
Most important symptoms / effects	No specific symptoms reasonably foreseeable under normal conditions of use.
Immediate medical attention / treatment	Treat symptomatically.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), foam or dry chemical.
Unsuitable extinguishing media	No data available
Special hazards arising from the substance or mixture	Thermal decomposition may generate irritating gases and vapors.
Explosion data	Mechanical impact: No information available. Static discharge: No information available.
Advice for firefighters	Use suitable protective clothing and self-contained breathing apparatus if necessary.

Safe use & protection

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation and use appropriate personal protective equipment.
Environmental precautions	Avoid uncontrolled release to the environment.
Methods and materials for containment and cleaning up	Collect the spilled material in a suitable closed container; avoid raising dust.
Reference to other sections	See sections 8 and 13 for exposure controls and disposal.

07 HANDLING AND STORAGE

Precautions for safe handling	Follow good laboratory practices. Avoid eye, skin and dust contact.
Conditions for safe storage	Keep the container tightly closed in a cool, dry, well-ventilated area.
Container labeling	Store in a properly labeled container.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures	Provide adequate ventilation, especially in confined spaces.
Hygiene measures	Do not eat, drink or smoke while using the product. Wash hands after handling.
Eye / face protection	Wear safety goggles.
Hand protection	Wear compatible chemical-resistant gloves.
Skin and body protection	Wear a laboratory coat and appropriate protective clothing.
Respiratory protection	Respiratory protection may be required when ventilation is inadequate or dust is generated.

Material properties

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09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White powder / solid
Odor	Slight
Odor threshold	No data available
pH	10–11.5 (1% aqueous solution)
Melting point / freezing point	168.5°C (335.3°F)
Initial boiling point and boiling range	219–220°C at 10 mmHg
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	550 g/L in water (25°C)
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 STABILITY AND REACTIVITY

Reactivity	Stable.
Chemical stability	Stable in a cool, dry place.
Possibility of hazardous reactions	No hazardous reaction reported.
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

Health & environment

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	No data available; not classified.
Skin corrosion / irritation	Available data do not support classification.
Serious eye damage / eye irritation	Available data do not support classification.
Carcinogenicity	No known carcinogenic chemicals identified.
Reproductive toxicity	Available data do not support classification.
STOT - SE	Available data do not support classification.
STOT - RE	Available data do not support classification.
Aspiration hazard	Available data do not support classification.

11.2 Potential health effects

Ingestion: No significant hazard expected under normal use.
Inhalation: Dust may cause discomfort.
Skin: No significant hazard expected.
Eyes: No significant hazard expected; rinse after contact.

11.3 Additional information

No additional information is available

12 ECOLOGICAL INFORMATION

Ecotoxicity	Avoid discharge into drains.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	Water soluble; may move through soils and water systems.
Results of PBT and vPvB assessment	Not considered PBT or vPvB.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of in accordance with relevant local regulations.
Contaminated packaging	Dispose of unused product and contaminated packaging through suitable waste collection.

Transport & reference

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14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazard
DOT (US)	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.
IMDG	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.
IATA	-	Not regulated for transport.	-	-	No transport environmental hazard indicated.

Special precautions for user	No data available
Transport in bulk (MARPOL / IBC)	Not applicable

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	No specific restrictions identified; chemical inventories vary by jurisdiction.
Environmental hazards	Not classified as environmentally hazardous.
Chemical Safety Assessment	A chemical safety assessment has not been conducted.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail