Safety Data Sheet (SDS)

Product Name: Tris(hydroxymethyl)aminomethane
CAS Number: 77-86-1
EC Number: 201-064-4
Molecular Formula: C4H11NO3
Molecular Weight: 121.14 g/mol

1. Identification

Product identifier
Tris(hydroxymethyl)aminomethane

Synonyms
Tris
Tris Base
THAM
Trometamol

Recommended use
Laboratory chemical, analytical reagent, buffer component, technical compound for research and laboratory use.

Supplier
Rexar
Genestetstraat 3
2394 XK Hazerswoude Rijndijk
Netherlands
info@rexar.nl

2. Hazard Identification

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Skin Irritation, Category 2
H315 Causes skin irritation

Eye Irritation, Category 2
H319 Causes serious eye irritation

Specific target organ toxicity — single exposure, Category 3
H335 May cause respiratory irritation

Label elements

Hazard pictogram
GHS07 (Exclamation mark)

Signal word
Warning

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

Precautionary statements
P261 Avoid breathing dust
P264 Wash thoroughly after handling
P280 Wear protective gloves and eye protection
P302 + P352 IF ON SKIN: Wash with plenty of water
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P332 + P313 If skin irritation occurs: Get medical advice/attention
P337 + P313 If eye irritation persists: Get medical advice/attention

3. Composition / Information on Ingredients

Substance
Tris(hydroxymethyl)aminomethane

CAS Number
77-86-1

EC Number
201-064-4

Purity
Typically ≥99 % depending on batch and supplier.

4. First Aid Measures

General advice
Remove contaminated clothing. Seek medical advice if symptoms persist.

Inhalation
Move person to fresh air. Seek medical attention if irritation develops. Inhalation of dust may irritate the respiratory system.

Skin contact
Wash thoroughly with soap and water. Seek medical attention if irritation persists.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion
Rinse mouth with water. Do not induce vomiting. Seek medical attention if discomfort occurs.

5. Fire Fighting Measures

Suitable extinguishing media
Water spray, dry chemical powder, carbon dioxide or foam.

Specific hazards
Combustion may produce carbon oxides and nitrogen oxides.

Protective equipment
Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

6. Accidental Release Measures

Personal precautions
Use appropriate personal protective equipment. Avoid dust formation and avoid breathing dust.

Environmental precautions
Prevent large quantities from entering drains or waterways.

Methods for cleanup
Sweep or collect material carefully and place in a suitable closed container for disposal.

7. Handling and Storage

Handling
Handle in accordance with good laboratory practice. Avoid dust formation and contact with skin, eyes and clothing.

Storage
Store in a cool, dry and well-ventilated area. Keep container tightly closed. Some supplier data indicate storage in a cool, dark place and protection from moisture.

8. Exposure Controls / Personal Protection

Engineering controls
Use adequate ventilation or local exhaust ventilation.

Personal protective equipment

Eye protection
Safety glasses or chemical splash goggles

Skin protection
Protective gloves

Respiratory protection
Use suitable respiratory protection if dust is generated.

9. Physical and Chemical Properties

Appearance
White crystalline powder or solid.

Odor
No specific data available

Melting point
Approx. 168–176 °C depending on source/specification.

Solubility
Highly soluble in water; slightly soluble in ethanol.

10. Stability and Reactivity

Stability
Stable under recommended storage conditions.

Conditions to avoid
Dust formation, moisture and excessive heat.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides and nitrogen oxides under fire conditions.

11. Toxicological Information

Acute toxicity
Not generally classified as acutely toxic under CLP in the sources reviewed.

Skin irritation
Causes skin irritation.

Eye irritation
Causes serious eye irritation.

Respiratory irritation
May cause respiratory irritation.

12. Ecological Information

Ecotoxicity
No specific ecotoxicological data identified in the sources reviewed.

Persistence and degradability
No specific data available.

13. Disposal Considerations

Dispose of material in accordance with local, regional and national regulations.
Dispose through a licensed chemical waste contractor.

14. Transport Information

UN number
Not regulated for transport.

Transport hazard class
Not classified as dangerous goods for transport in the sources reviewed.

15. Regulatory Information

Classification according to EU CLP Regulation (EC) No. 1272/2008.

Skin Irritation Category 2 – H315
Eye Irritation Category 2 – H319
STOT SE Category 3 – H335

16. Other Information

This Safety Data Sheet is provided for laboratory safety guidance.
The product is supplied as a chemical substance for analytical, technical or research applications only.
Not intended for human or animal consumption or for medical use.