

## **MATERIAL SAFETY DATA SHEET**

### **TRIS BUFFER 99%** **(EXTRA PURE) [Tris (Hydroxymethyl) Amino Methane]** **MSDS CAS: 77-86-1**

#### **Section 1: Chemical Product and Company Identification**

##### **Section 1: Chemical Product**

**Product Name:** TRIS BUFFER

**CAS#:** 77-86-1

**Synonym:** Trometamol, Tris base

**Chemical Name:** Not available.

**Chemical Formula:**  $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$

**Brand:** OXFORD

##### **Details Of The Supplier Of The Safety Data Sheet:**

##### **Company identification:**

**OXFORD LAB FINE CHEM LLP**

Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,  
Navghar, Vasai (East). Palghar - 401 210.  
Mumbai, Maharashtra, INDIA.

**Tel:** 91-250-2390989

**Tel/Fax:** 91-250-2390032

#### **Section 2: Composition and Information on Ingredients**

##### **Composition:**

Name	CAS #	% by Weight
TRIS BUFFER	77-86-1	100%

## Section 3: Hazards Identification

### Classification of the substance or mixture

Classification according to Regulation (EC) No 1999/45

Classification : Xi; R36/38

### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards: Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315 Eye irritation - Category 2A - Warning (CLP: Eye Irrit. 2) H319

**Other hazards:** The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## Section 4: First Aid Measures

### Description of first aid measures

**Inhalation:** Assure fresh air breathing. Allow the victim to rest.

**Skin contact:** Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

**Ingestion:** Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

Symptoms relating to use: Causes serious eye irritation. Causes skin irritation.

### Indication of any immediate medical attention and special treatment needed

**General information:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

## Section 5: Fire and Explosion Data

### Extinguishing media

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** : Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

## Section 5: Fire and Explosion Data (Continued)

### Special hazards arising from the substance or mixture

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

### Advice for fire-fighters

**Protection against fire:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures:** Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**For emergency responders:** Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel:** Evacuate unnecessary personnel.

### Environmental precautions:

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### Methods and materials for containment and cleaning up

**Clean up methods :** On land, sweep or shovel into suitable containers. Minimize generation of dust.  
Store away from other materials.

## Section 7: Handling and Storage

### Precautions for safe handling

**Handling:** Wash thoroughly after handling. Wash thoroughly after handling.

**Technical protective measures:** Provide good ventilation in process area to prevent formation of Vapor.

### Conditions for safe storage, including any incompatibilities

**Storage:** Keep only in the original container in a cool, well ventilated place. Keep container closed.

**Storage - away from:** Strong bases. Strong acids. Sources of ignition. Direct sunlight.

### Specific end uses

**Specific end use(s):** None.

## Section 8: Exposure Controls/Personal Protection

### Personal protection

- |                          |   |
|--------------------------|---|
| • Respiratory protection | : Avoid all unnecessary exposure.         |
| • Hand protection        | : Wear approved mask.                     |
| • Skin protection`       | : Wear protective gloves.                 |
| • Eye protection         | : Wear suitable protective clothing.      |
| • Others                 | : Chemical goggles or safety glasses.     |
|                          | : When using, do not eat, drink or smoke. |

### Control parameters

Occupational Exposure Limits : No data available.

## Section 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state at 20 °C	: Solid.
Color	: White crystalline.
Odor	: Odourless
Odor threshold	: No data available.
pH value	: 10.5 - 12
Melting point [°C]	: 167-172 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: 219 - 220 °C
Initial boiling point [°C]	: 219°C
Final boiling point [°C]	: 220 °C
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm3]	: N/A
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Soluble in water

## Section 9: Physical and Chemical Properties (Continued)

Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 10.5-12
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A
Molecular Weight	: 121.14 g/mol

### Other information

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidizing properties	: No data available.

## Section 10: Stability and Reactivity Data

### Reactivity

Reactivity : Not established.

### Chemical stability

Chemical stability : Stable under recommended storage conditions.

### Possibility of hazardous reactions

Hazardous reactions : Not established.

### Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

### Incompatible materials

Materials to avoid : Strong acids. Strong bases.

### Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

## Section 11: Toxicological Information

### Information on toxicological effects

#### Acute toxicity

- Inhalation : Based on available data, the classification criteria are not met.
  - Dermal : Based on available data, the classification criteria are not met.
  - Ingestion : Based on available data, the classification criteria are not met.
- Corrosion : Based on available data, the classification criteria are not met.
- Irritation : Causes serious eye irritation.  
Causes skin irritation.

#### Sensitization

#### Mutagenicity

#### Carcinogenicity

#### Toxic for reproduction

#### STOT-single exposure

#### STOT-repeated exposure

#### Aspiration hazard

- : Based on available data, the classification criteria are not met.
- : Based on available data, the classification criteria are not met.
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## Section 12: Ecological Information

### Toxicity

Toxicity information : Not established.

### Persistence – degradability

Persistence - degradability : Biodegradable.

### Bio accumulative potential

Bio accumulative potential : Not established.

### Mobility in soil

Mobility in soil : Not established.

### Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### Other adverse effects

Environmental precautions: Avoid release to the environment.

## Section 13: Disposal Considerations

### Waste treatment methods

**General:** Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

## Section 14: Transport Information

### Land transport (ADR-RID)

**General information:** Not regulated.

### Sea transport (IMDG)

**General information:** Not regulated.

### Air transport (ICAO-IATA)

**General information:** Not regulated.

## Section 15: Other Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**  
Ensure all national/local regulations are observed.

**REACH Restrictions - Annex XVII:** The components of this product are not subject to restrictions.

**REACH Authorization - Annex XIV:** The components of this product are not subject to authorization.

### Chemical Safety Assessment

**Chemical Safety Assessment:** It has not been carried out.

## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.



## ***Disclaimer:***

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