**OXFORD LAB FINE CHEM LLP**

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Oxford
Range of
Laboratory Chemicals

# MATERIAL SAFETY DATA SHEET

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

## Section 1: Chemical Product and Company Identification

**Section 1: Chemical Product**
**Product Name : TRIS BUFFER**
**CAS#: 77-86-1**
**C.I. No.: Not available.**
**Synonym : Not available.**
**Chemical Name: Not available.**
**Chemical Formula: $NH_2.C(CH_2OH)_3$**

**Brand: OXFORD**

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

**Company identification:** **OXFORD LAB FINE CHEM LLP**
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## 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**

**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.**

**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**

**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** : Avoid all unnecessary exposure.
• **Respiratory protection** : Wear approved mask.
• **Hand protection** : Wear protective gloves.
• **Skin protection `** : Wear suitable protective clothing.
• **Eye protection** : Chemical goggles or safety glasses.
• **Others** : 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 to off white
**Odor** : Odourless
**Odor threshold** : No data available.
**pH value** : Not applicable.
**Melting point [°C]** : 167-172 °C

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

| | |
|---|---|
| **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** |
| **Solubility in water** | **: N/A** |
| **Log Pow octanol / water at 20°C** | **: No data available.** |
| **Solubility** | **: 10.5-12** |
| **Viscosity at 40°C [mm2/s]** | **: N/A** |
| **Molecular Weight** | **: 121.14** |

**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.**

# Section 10: Stability and Reactivity Data (Continued)

**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** | **: Based on available data, the classification criteria are not met.** |
| **Mutagenicity** | **: Based on available data, the classification criteria are not met.** |
| **Carcinogenicity** | **: Based on available data, the classification criteria are not met.** |
| **Toxic for reproduction** | **: Based on available data, the classification criteria are not met.** |
| **STOT-single exposure** | **: Based on available data, the classification criteria are not met.** |
| **STOT-repeated exposure** | **: Based on available data, the classification criteria are not met.** |
| **Aspiration hazard** | **: Based on available data, the classification criteria are not met.** |

# Section 12: Ecological Information

**Toxicity**

**Toxicity information : Not established.**

## Section 12: Ecological Information (Continued)

**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**

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

**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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