


Material Safety Data Sheet	
TRIS BUFFER LR	VERSION : 03 DATE OF ISSUE : 31-01-2022 SUPERSEDES : 02
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1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : TRIS BUFFER LR
Product code : 19625
Identification of the product : TRIS BUFFER
CAS No : 77-86-1

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM
 Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,
 Mumbai – 400 002 (INDIA)
 Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.
 Email : info@molychem.net
 Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat
 Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm).

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : Xi; R36/38

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

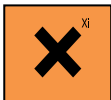
Health hazards : Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : Xi : Irritant



R Phrase(s) :

R36/38 : Irritating to eyes and skin.

S Phrase(s) :

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 : Wear suitable protective clothing.

Labelling Regulation EC 1272/2008 (CLP)

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Hazard pictograms



Signal words :

Warning

Hazard statements :

H319 :

Causes serious eye irritation.

H315 :

Causes skin irritation.

Precautionary statements

• Prevention :

P280:

Wear protective gloves, protective clothing, eye protection, face protection.

P264:

Wash thoroughly after handling.

• Response :

P302+P352:

IF ON SKIN : Wash with plenty of soap and water.

P332+P313:

If skin irritation occurs : Get medical advice.

P305+P351+P338:

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P363:

Wash contaminated clothing before reuse.

2.3. Other hazards

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.

3. Composition/information on ingredients

3.1 Substances

Synonyms : 2-Amino-2-(hydroxymethyl)-1,3-propanediol
THAM
Trometamol
Tris base

Formula : $C_4H_{11}NO_3$

Molecular weight : 121,14 g/mol

CAS-No. : 77-86-1

EC-No. : 201-064-4

No components need to be disclosed according to the applicable regulations.

4. First aid measures


4.1. Description of first aid measures

If inhaled

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After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up


Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections

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For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls/personal protection

8.1. Exposure controls

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.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties


9.1. Information on basic physical and chemical properties

- | | |
|---|---|
| a) Physical state | crystalline |
| b) Color | white |
| c) Odor | slight, characteristic |
| d) Melting point/freezing point | Melting point/range: 169 °C at ca.1.013 hPa - OECD Test Guideline 102 |
| e) Initial boiling point and boiling range | 288 °C at 1.013 hPa - OECD Test Guideline 103 - Decomposition at boiling point. |
| f) Flammability (solid, gas) | No data available |
| g) Upper/lower flammability or explosive limits | No data available |
| h) Flash point | Not applicable |


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i) Autoignition temperature	The substance or mixture is not classified as self heating.
j) Decomposition temperature	143 °C
k) pH	10,2 - 10,6 at 6 g/l at 20 °C
l) Viscosity	Viscosity, kinematic: Not applicable Viscosity, dynamic: No data available
m) Water solubility	678 g/l at 20 °C - completely soluble
n) Partition coefficient: n-octanol/water	log Pow: -2,31 at 20 °C - Bioaccumulation is not expected.
o) Vapor pressure	< 0,1 hPa at 20 °C
p) Density	1,32 g/cm ³ at 20 °C - OECD Test Guideline 109
Relative density	1,32 at 20,4 °C - OECD Test Guideline 109
q) Relative vapor density	
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none
9.2. Other information	
Solubility in other solvents	ethyl acetate at 20 °C - slightly soluble Alcohol at 20 °C - soluble Dimethylformamide at 20 °C - soluble Acetone at 20 °C - soluble Chloroform at 20 °C - practically insoluble
Dissociation constant	8,22 at 25 °C
10. Stability and reactivity	
10.1. Reactivity	
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.	
10.2. Chemical stability	
The product is chemically stable under standard ambient conditions (room temperature) .	
10.3. Possibility of hazardous reactions	
Violent reactions possible with:	
Oxidizing agents	
Bases	

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Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!

10.4. Conditions to avoid

no information available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity :	Not classified
Skin corrosion/irritation :	Causes skin irritation. pH: 10.5 - 12
Serious eye damage/irritation :	Causes serious eye irritation. pH: 10.5 - 12
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
Specific target organ toxicity (single exposure) :	May cause respiratory irritation.
Specific target organ toxicity (repeated exposure) :	Not classified
Aspiration hazard :	Not classified

12. Ecological information

12.1. Toxicity

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 980 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to bacteria	static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)


12.2. Persistence - degradability

Biodegradability	aerobic - Exposure time 28 d Result: 97,1 % - Readily biodegradable. (OECD Test Guideline 301F)
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12.3. Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4. Mobility in soil

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No data available

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Discharge into the environment must be avoided.

13. Disposal considerations

13.1. Waste treatment methods

No data available

14. Transport information

14.1. UN number

ADR/RID: -

IMDG: -

IATA: -

14.2. UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3. Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

Further information

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment


For this product a chemical safety assessment was not carried out

16. Other information

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Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information : None.

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End of document

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