



**1,1,1-TRIS(HYDROXYMETHYL)
PROPANE
CAS NO 77-99-6**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : 1,1,1-Tris(Hydroxymethyl) Propane

CAS-No. : 77-99-6

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 2-Ethyl-2-hydroxymethyl-1,3-propanediol
Trimethylolpropane

Formula : C₆H₁₄O₃

Molecular weight : 134.17 g/mol

CAS-No. : 77-99-6

EC-No. : 201-074-9

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

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|--|
| a) Appearance | Form: crystalline
Colour: white |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | Melting point/range: 56 - 58 °C
Melting point/range: 56 - 61 °C |
| f) Initial boiling point and boiling range | 159 - 161 °C at 3 hPa |
| g) Flash point | 180 °C - Cleveland open cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | The product is not flammable. |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | 50 mmHg at 210 °C |
| l) Vapour density | No data available |
| m) Relative density | No data available |
| n) Water solubility | No data available |

- | | |
|---|-------------------------|
| o) Partition coefficient: n-octanol/water | log Pow: -0.47 at 26 °C |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 14,700 mg/kg(Propylidynetrimethanol)

LC50 Inhalation - Rat - male - 4 h - > 0.85 mg/l(Propylidynetrimethanol)

LD50 Dermal - Rabbit - > 10,000 mg/kg(Propylidynetrimethanol)

Skin corrosion/irritation

Skin - Rabbit(Propylidynetrimethanol)

Result: No skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - Rabbit(Propylidynetrimethanol)

Result: No eye irritation

Respiratory or skin sensitisation

- Mouse(Propylidynetrimethanol)

Result: Did not cause sensitisation on laboratory animals.

(OECD Test Guideline 429)

Germ cell mutagenicity

No data available(Propylidynetrimethanol)

In vitro mammalian cell gene mutation test(Propylidynetrimethanol)

Chinese hamster fibroblasts

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Propylidynetrimehanol)

Specific target organ toxicity - single exposure

No data available(Propylidynetrimehanol)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Propylidynetrimehanol)

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 67 mg/kg(Propylidynetrimehanol)

RTECS: TY6470000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Propylidynetrimehanol)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Alburnus alburnus - > 1,000 mg/l - 96 h(Propylidynetrimehanol)

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 13,000 mg/l - 48 h(Propylidynetrimehanol)

and other aquatic invertebrates

Toxicity to algae EC50 - Pseudokirchneriella subcapitata - > 1,000 mg/l - 72 h(Propylidynetrimehanol)

12.2 Persistence and degradability

Biodegradability Result: 6 % - Not readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp)(Propylidynetrimehanol)
Bioconcentration factor (BCF): < 17
(OECD Test Guideline 305C)

12.4 Mobility in soil

No data available(Propylidynetrimehanol)

12.5 Results of PBT and vPvB assessment

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

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

