

**Triss (Hydroxy Methyl) Amino Methane**  
**CAS No 77-86-1****MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**Product name : **Triss (Hydroxy Methyl) Amino Methane**

CAS-No. : 77-86-1

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

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

**1.3 Details of the supplier of the safety data sheet**Company : Pallav Chemicals & Solvents Pvt. Ltd  
253, Shiv Shakti Industrial Estate, Opp Mittal Estate  
Andheri Kurla Road, Andheri (E), Mumbai - 400050  
INDIA

Telephone : +91 22 4928 4000

Email : [sales@pallavchemicals.com](mailto:sales@pallavchemicals.com)**1.4 Emergency telephone number**

Emergency Phone # : +91 22 4928 4000 (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.  
This substance is not classified as dangerous according to Directive 67/548/EEC.**2.2 Label elements**

The product does not need to be labelled in accordance with EC directives or respective national laws.

**2.3 Other hazards**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

**SECTION 3: Composition/information on ingredients****3.1 Substances**Synonyms : 2-Amino-2-(hydroxymethyl)-1,3-propanediol  
THAM  
Trometamol  
Tris base  
Tris(hydroxymethyl)aminomethaneFormula : C<sub>4</sub>H<sub>11</sub>NO<sub>3</sub>

Molecular Weight : 121,14 g/mol

CAS-No. : 77-86-1

EC-No. : 201-064-4

Registration number : 01-2119957659-16-XXXX

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, nitrogen oxides (NOx)

##### **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting 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**

Do not let product enter drains.

##### **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.

Hygroscopic. Store under inert gas.

##### **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

#### Components with workplace 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 levels of dusts are desired, use type N95 (US) or type P1 (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

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: crystalline<br>Colour: colourlesswhite              |
| b) Odour  | no data available   |
| c) Odour Threshold                              | no data available   |
| d) pH   | 10,5 - 12   |
| e) Melting point/freezing point                 | Melting point/range: 169 °C                               |
| f) Initial boiling point and boiling range      | 288 °C at 1.013 hPa - Decomposes below the boiling point. |
| g) Flash point                                  | no data available   |
| h) Evaporation rate                             | no data available   |
| i) Flammability (solid, gas)                    | no data available   |
| j) Upper/lower flammability or explosive limits | no data available   |
| k) Vapour pressure                              | no data available   |
| l) Vapour density                               | no data available   |
| m) Relative density                             | no data available   |
| n) Water solubility                             | 678 g/l at 20 °C  |

- o) Partition coefficient: n-octanol/water      log Pow: -2,31 at 20 °C
- p) Auto-ignition temperature      The substance or mixture is not classified as self heating.
- q) Decomposition temperature      no data available
- r) Viscosity      not applicable
- s) Explosive properties      Not explosive
- t) Oxidizing properties      The substance or mixture is not classified as oxidizing.

## 9.2 Other safety information

- Bulk density      800 kg/m<sup>3</sup>
- Dissociation constant      8,22 at 25 °C

## 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

hygroscopic

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

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 - > 3.000 mg/kg

LD50 Dermal - rat - > 5.000 mg/kg  
(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - rabbit

Result: No eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

Buehler Test - guinea pig

Does not cause skin sensitisation.

(OECD Test Guideline 406)

#### Germ cell mutagenicity

Result: Not mutagenic in Ames Test.

in vitro assay  
Result: negative  
In vitro tests did not show mutagenic effects

Result: In vivo tests did not show any chromosomal changes.

### **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

### **Specific target organ toxicity - single exposure**

no data available

### **Specific target organ toxicity - repeated exposure**

no data available

### **Aspiration hazard**

no data available

### **Additional Information**

Repeated dose toxicity - rat - Oral - No observed adverse effect level - 1.000 mg/kg

RTECS: TY2900000

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

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Toxicity to daphnia and other aquatic invertebrates      EC50 - Daphnia - > 980 mg/l - 48 h

Toxicity to algae      EC50 - Algae - 397 mg/l - 72 h  
NOEC - Algae - 100 mg/l - 72 h

### **12.2 Persistence and degradability**

Biodegradability      Result: - Readily biodegradable.  
(OECD Test Guideline 301F)

### **12.3 Bioaccumulative potential**

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

### **12.4 Mobility in soil**

no data available

### **12.5 Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

### **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.

**SECTION 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

**SECTION 15: Regulatory information**

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

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

no data available

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has been carried out for this substance.

**SECTION 16: Other information****Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.pallavchemicals.com](http://www.pallavchemicals.com) for additional terms and conditions of sale.