

## SAFETY DATA SHEET

according to EC directive 2001/58/EC  
Version 3.0 Revision Date 22.03.2007  
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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : **Tris(hydroxymethyl)aminomethane**

Product Number : 252859  
Brand : Sigma-Aldrich

Company : Sigma-Aldrich Pte Ltd  
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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Tris base; Tris(hydroxymethyl)aminomethane

Formula : C<sub>4</sub>H<sub>11</sub>NO<sub>3</sub>  
Molecular Weight : 121,14 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration [%]
<b>tris (Hydroxymethyl) aminomethane free base</b>				
77-86-1	201-064-4	-	Xi, R36/37/38	-

### 3. HAZARDS IDENTIFICATION

**Risk advice to man and the environment**  
Irritating to eyes, respiratory system and skin.

### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

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

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

### Environmental precautions

Do not let product enter drains.

### Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

### Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

#### Eye protection

Safety glasses

#### Skin and body protection

impervious clothing, Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form crystalline

Colour colourless  
white

### Safety data

pH 10,5

Melting point	171,2 - 172,3 °C
Boiling point	219 - 220 °C at 13,3 hPa
Flash point	not applicable
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

#### Hazardous decomposition products formed under fire conditions.

Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 5.900 mg/kg

### Irritation and corrosion

Skin: no data available

### Sensitization

Remarks: no data available

### Chronic exposure

no data available

### Signs and Symptoms of Exposure

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

### Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability      Remarks: no data available

### Ecotoxicity effects

#### Further information on ecology

no data available

### 13. DISPOSAL CONSIDERATIONS

**Product**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

**Contaminated packaging**

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

**ADR/RID**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

### 15. REGULATORY INFORMATION

**Labelling according to EC Directives**

## Hazard symbols

Xi                      Irritant

## R-phrase(s)

R36/37/38            Irritating to eyes, respiratory system 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.

### 16. OTHER INFORMATION

**Further information**

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