



## SAFETY DATA SHEET

### TRIETHANOLAMINE

#### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name:	TRIETHANOLAMINE
Recommended use:	Chemical for industry
Manufacturer/Supplier:	<b>MODERN CHEMICAL CO.,LTD.</b> 82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63, Klong Tan Nuea, Watthana, Bangkok 10110
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Fax No:	0-2715-0908-9, 0-2391-1571-2
Emergency Telephone No:	0-2715-0897-9, 0-2392-3410-3

#### 2. HAZARDS IDENTIFICATION

##### Label elements

Pictogram



Signal word

Danger

##### Hazard statement(s)

- 1.) Causes skin irritation.
- 2.) May be fatal if swallowed and enters airways.
- 3.) May cause drowsiness or dizziness.
- 4.) Toxic to aquatic life with long lasting effects.
- 5.) May damage the unborn child. Suspected of damaging fertility.

##### Precautionary statement(s)

- 1.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- 2.) Avoid release to the environment.



- 3.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.
- 4.) IF IN EYES: Rinse cautiously with water for 15 minutes.
- 5.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** 2,2',2-Nitrioltriethanol; Triethylolamine

Ingredients	% (w/w)	CAS NO.
TRIETHANOLAMINE	100	102-71-6

### 4. FIRST AID MEASURES

- General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.
- Skin contact:** Wash off with soap and plenty of water.
- Eye contact:** Flush eyes with water as a precaution.
- Ingestion:** **Do NOT induce vomiting.** Never give anything by mouth to an unconscious person. Rinse mouth with water.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media:**

No data available

**Specific hazards arising from Chemicals:**

Carbon dioxides

**Special protective equipment for fire-fighters:**

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid breathing vapors, mist or gas.

**Environmental precautions:** Do not let product enter drains.



**Methods and materials for containment and cleaning up:** Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling & Product Transfer:

Normal measures for preventive fire protection.

### Conditions for safe storage& Unsuitable Materials:

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** no data available

**Appropriate Engineering Controls:** General industrial hygiene practice.

### Individual Protection Measures

#### Individual Protection Measures

#### Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection:

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

#### Eye protection:

Safety glasses with side-shields conforming to EN166

#### Skin and body protection:

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

<b>Form, Color and Odor :</b> liquid, colourless, characteristic	<b>Evaporation rate :</b> N/A
<b>Melting Point:</b> -21.5 °C	<b>Specific gravity :</b> 1.12 g/cm <sup>3</sup> at 20 °C
<b>pH :</b> N/A	<b>Solubility in water :</b> Soluble at 20 °C



<b>Boiling point:</b> 190-193 °C	<b>Viscosity :</b> N/A
<b>Vapour pressure :</b> N/A	<b>Vapour density :</b> 5.14 g/l
<b>Lower explosive limits:</b> 1.3 %Vol	<b>Upper explosive limits:</b> 8.5 %Vol
<b>Auto-ignition temperature:</b> 360 °C	<b>Flash Point:</b> 185 °C
<b>Odour threshold:</b> N/A	<b>Flammability (solid, gas):</b> N/A
<b>Decomposition temperature:</b> N/A	<b>Solubility in other solvents:</b> N/A
<b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> N/A	

## 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	No data available
<b>Reactions:</b>	No data available
<b>Possibility of hazardous reactions:</b>	No data available
<b>Conditions to avoid:</b>	No data available
<b>Materials to avoid:</b>	Strong oxidizing agents
<b>Hazardous decomposition products:</b>	Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	No data available
<b>Sensitization:</b>	May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation.
<b>Sign chronic toxicity:</b>	No data available
<b>Further toxicological information:</b>	No data available

## 12. ECOLOGICAL INFORMATION

### Toxicity:

Toxicity to fish:	No data available
Toxicity to daphnia and other aquatic invertebrates:	No data available
Toxicity to algae	No data available
Toxicity to bacteria	No data available



**Biodegradability Remarks:** No data available

**Bioaccumulative Potential:** No data available

**Mobility:** No data available

**Affected in any other way:** No data available

### 13. DISPOSAL CONSIDERATIONS

**Material Disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Container Disposal:** Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### ADR/RID

No data available

#### IMDG

No data available

#### IATA

No data available

### 15. REGULATORY INFORMATION

#### GHS - Labelling:

##### Hazard statement(s)

No data available

##### Precautionary statement(s)

No data available

##### Hazard symbol(s)

No data available

##### R-phrase(s)

No data available

##### S-phrase(s)

No data available



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## 16. OTHER INFORMATION

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