

# SAFETY DATA SHEET

## TRIETHANOLAMINE AQUEOUS

**MTEA080**

### 1. Identification of the substance/preparation and of the company/undertaking

**Product name** : TRIETHANOLAMINE AQUEOUS      **Supplier** : Brenntag UK and Ireland  
 Albion House  
 Rawdon Park  
 Green Lane  
 Yeadon  
 Leeds  
 LS19 7XX

**Chemical product name** : TRIETHANOLAMINE

**Synonyms** : TRIETHANOLAMINE AQUEOUS  
 2-HYDROXYETHYLAMINE

**EMERGENCY ONLY TELEPHONE NUMBER** : (N.C.E.C. CULHAM) 01865 407333      **Telephone No.** : (0113) 3879200

**Fax No.** : (0113) 3879280

**Formula** : (HOCH<sub>2</sub>CH<sub>2</sub>)<sub>3</sub>N      **Molecular Mass** : 149.19

### 2. Composition/information on ingredients

**Substance/Preparation** : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) TRIETHANOLAMINE	102-71-6	85-100	203-049-8		

\* Occupational Exposure Limit(s), if available, are listed in Section 8

**Composition** : CONTAINS TRIETHANOLAMINE AT SPECIFIED MASS CONCENTRATION.

**CAS No.** : 102-71-6

**EINECS Number** : 203-049-8

### 3. Hazards identification

### 4. First-aid measures

#### First-Aid measures

- Inhalation** : Remove from exposure. Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. If breathing stops or shows signs of failing, give artificial respiration. Do not use mouth to mouth ventilation. Obtain medical attention urgently.
- Ingestion** : Wash out mouth with water. Have victim drink 240-300ml of water to dilute stomach contents. Obtain medical attention. Do not induce vomiting.
- Skin contact** : Immediately flood the skin with large quantities of water, preferably under a shower. Obtain medical attention if bliste ring occurs or re dne ss pe rsists. Re move contaminate d clothing as washing proce eds. Contaminate d clothing should be washed or dry-cleaned before re-use.
- Eye Contact** : Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open.

#### Effects and symptoms

- Skin contact** : Hazardous in case of skin contact (irritant). Skin inflammation is characte rize d by itching, scaling, re dde ning, or, occasionally, blistering.
- Eye Contact** : Hazardous in case of eye contact (irritant).

### 5. Fire-fighting measures

#### Extinguishing Media

- Suitable** : Se le ct extingui shing age nt appropriate to othe r mate rials involve d. Use wate r spray, foam, dry chemical or carbon dioxide. Use water spray, fog or alcohol resistant foam.

#### Unusual fire/explosion Hazards

- Hazardous thermal (de)composition products** : This product may give rise to hazardous fumes in a fire. These may include: Ammonia, carbon oxides, nitrogen oxides. Irritating vapours/gases may be formed.

#### Special fire-fighting procedures

- Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

#### Protection of fire-fighters

- Wear full protective clothing and self-contained breathing apparatus.

## 6. Accidental release measures

- Personal Precautions** : Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing.
- Environmental precautions and cleanup methods** : Transfer into suitable containers for recovery or disposal. Drench spillage with water and wash to drain, diluting greatly with water. Contain and absorb using earth, sand or other inert material.
- : Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

## 7. Handling and storage

- Handling** : Keep away from heat. Keep away from sources of ignition. Empty containers may still contain significant residual amounts of the product. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Storage area should be: cool, under cover, well ventilated. Store under a nitrogen blanket. Protect from high temperatures, sunlight and freezing.
- Packaging materials**
- Recommended use** : Use original container.

## 8. Exposure controls/personal protection

- Engineering measures** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below the respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Workplace Exposure Limits** : Not available.
- Personal protective equipment**
- Respiratory system** : Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Overalls or Lab coat.
- Hands** : Chemical resistant gloves.
- Eyes** : Chemical splash goggles.

## 9. Physical and chemical properties

- Physical state** : Hygroscopic. Viscous liquid.
- Colour** : Colourless.
- Odour** : Mild. Ammoniacal.
- Boiling point** : >270°C (518°F)
- Melting point** : <14°C (57.2°F)
- Density** : 1.12 g/cm<sup>3</sup> at 15°C (59°F)
- Vapour density** : 5.3 (Air = 1)
- Vapour pressure** : <0.01 mbar at 40°C
- Solubility** : Completely soluble.
- Octanol/water partition coefficient** : The product is more soluble in water; log(oil/water) = -2.3
- pH** : Alkaline
- Flash point** : CLOSED CUP: >184°C (363.2°F).
- Autoignition temperature** : >175°C (347°F)
- Lower explosion limit** : LOWER: 3.6% UPPER: 7.2%
- Viscosity** : Dynamic: 600 mPa.s at 25°C.

## 10. Stability and reactivity

- Stability** : The product is stable.
- Materials to avoid** : Acids, oxidising agents, zinc, aluminium, copper, copper alloys, potassium, magnesium.
- Hazardous decomposition products** : This product may give rise to hazardous fumes in a fire. These may include: Ammonia, carbon oxides, nitrogen oxides. Irritating vapours/gases may be formed.

## 11. Toxicological information

- Local effects**
- Acute toxicity** : Acute oral toxicity (LD50): 5000 to 9600 mg/kg [Rat].  
Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit].  
May cause irritation of respiratory tract.

**12. Ecological information**

<b>Mobility</b>	: Soluble in water.
<b>Persistence/degradability</b>	: Readily biodegradable
<b>Bioaccumulative potential</b>	: Not expected to bioaccumulate.
<b>Ecotoxicity</b>	: Ecotoxicity in water: (LC50): 1800 to 11800 mg/l, 96 hours [Fish]. (EC50): 739 to 2038 mg/l, 24 hours [Daphnia].

**13. Disposal considerations**

**Methods of disposal ; Waste of residues ; Contaminated packaging** : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Waste Classification** : Not applicable.

**14. Transport information****International transport regulations**

**UN : UN number** Not regulated.

**15. Regulatory information****EU Regulations**

<b>Risk Phrases</b>	: This product is not classified according to the EU regulations.
<b>Product Use</b>	: Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use. - Consumer applications.

**16. Other information****HISTORY**

<b>Date of printing</b>	: 30/03/2010.
<b>Date of issue</b>	: 30/03/2010.
<b>Date of previous issue</b>	: 10/11/2009.
<b>Version</b>	: 2.02
<b>Prepared by</b>	: Michael Hale / Alistair Hunter

**Notice to Reader**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

**CHANGES SINCE PREVIOUS VERSIONS:**

Version 2: R36/38 removed from section 15.

**Version** 2.02

**Page:** 3/3