

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** MONOETHANOLAMINE  
**CAS number:** 141-43-5  
**EINECS number:** 205-483-3  
**Index number:** 603-030-00-8  
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## 2. HAZARDS IDENTIFICATION

**Main hazards:** Harmful by inhalation. Irritating to eyes, respiratory system and skin.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

## 4. FIRST AID MEASURES (SYMPTOMS)

**Skin contact:** Irritation or pain may occur at the site of contact.  
**Eye contact:** There may be severe pain. Severe burns may result.  
**Ingestion:** Burns to mouth, throat and digestive tract. Ingestion may result in nausea, vomiting, sore throat, abdominal pain and diarrhoea.  
**Inhalation:** Nausea and stomach pain may occur. May cause symptoms similar to those of ingestion.

## 4. FIRST AID MEASURES (ACTION)

**Skin contact:** Wash the affected area with water. If irritation persists, seek medical advice.  
**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.  
**Ingestion:** Induce vomiting (but only with medical supervision). Transfer to hospital as soon as possible.  
**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Seek medical attention if required.

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### 5. FIRE-FIGHTING MEASURES

|                                     |  |
|-------------------------------------|--|
| <b>Extinguishing media:</b>         | Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Water.                                     |
| <b>Exposure hazards:</b>            | In a restricted air supply ammonia, oxides of nitrogen and carbon can be formed.                         |
| <b>Protection of fire-fighters:</b> | Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. |

### 6. ACCIDENTAL RELEASE MEASURES

|                                   |  |
|-----------------------------------|--|
| <b>Personal precautions:</b>      | Refer to section 8 of SDS for personal protection details.   |
| <b>Environmental precautions:</b> | Do not discharge into drains or rivers.  |
| <b>Clean-up procedures:</b>       | Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. |

### 7. HANDLING AND STORAGE

|                               |  |
|-------------------------------|--|
| <b>Handling requirements:</b> | Ensure there is sufficient ventilation of the area.  |
| <b>Storage conditions:</b>    | Avoid incompatible materials and conditions - see section 10 of SDS. Store in original drums in a cool well-ventilated area. |

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Workplace exposure limits

|                                |   |
|--------------------------------|---|
| <b>WEL (8 hr TWA):</b>         | 3 ppm (15 mg/m <sup>3</sup> )                             |
| <b>WEL (15 min STEL):</b>      | 6 ppm (15 mg/m <sup>3</sup> )                             |
| <b>Respiratory protection:</b> | Wear respirator with suitable filters if OEL is exceeded. |
| <b>Hand protection:</b>        | Protective gloves.  |
| <b>Eye protection:</b>         | Safety goggles.   |
| <b>Skin protection:</b>        | Wear normal work wear.                                    |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                      |                                |
|--------------------------------------|--------------------------------|
| <b>State:</b>                        | Liquid                         |
| <b>Colour:</b>                       | Colourless                     |
| <b>Odour:</b>                        | Slightly ammoniacal            |
| <b>Oxidising:</b>                    | Non-oxidising (by EC criteria) |
| <b>Also soluble in:</b>              | Alcohol. Acetone.              |
| <b>Viscosity:</b>                    | Viscous                        |
| <b>Boiling point/range°C:</b>        | 171                            |
| <b>Melting point/range°C:</b>        | 11                             |
| <b>Flammability limits %: lower:</b> | 5                              |
| <b>upper:</b>                        | 17                             |
| <b>Flash point°C:</b>                | 97                             |
| <b>Autoflammability°C:</b>           | 410                            |
| <b>Relative density:</b>             | 1.018                          |
| <b>pH:</b>                           | 11.8                           |

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**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Heat.

**Materials to avoid:** Strong acids. Strong oxidising agents. Do not use Sodium Nitrite or nitrosating agents in formulations containing this product. **DO NOT MIX WITH ANY OTHER CHEMICALS.**

**Haz. decomp. products:** The amines in the product react to form nitroamines which are a potential human cancer threat.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity:** MONOETHANOLAMINE  
ORL RBT LD50 2100 mg/kg  
SKN RBT LD50 1000 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** MONOETHANOLAMINE  
FISH 96H LC50 329 mg/l

**Mobility:** Soluble in water. Non-volatile.

**Persistence and degradability:** Rapid biodegradation at low concentration. (ca 10 ppm).

**Bioaccumulative potential:** No bioaccumulation potential.

**Other adverse effects:** Toxic to aquatic organisms.

**13. DISPOSAL CONSIDERATIONS**

**Disposal operations:** The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted. This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal. This product is subject to The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations and their amendments. (United Kingdom)

**14. TRANSPORT INFORMATION**

**ADR / RID**

|                       |                       |                             |    |
|-----------------------|-----------------------|-----------------------------|----|
| <b>UN no:</b>         | 2491                  | <b>ADR Class:</b>           | 8  |
| <b>Packing group:</b> | III                   | <b>Classification code:</b> | C7 |
| <b>Shipping name:</b> | ETHANOLAMINE SOLUTION |                             |    |
| <b>Labelling:</b>     | 8                     | <b>Hazard ID no:</b>        | 80 |



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**IMDG / IMO**

|                          |      |               |         |
|--------------------------|------|---------------|---------|
| <b>UN no:</b>            | 2491 | <b>Class:</b> | 8       |
| <b>Packing group:</b>    | III  | <b>EmS:</b>   | F-A,S-B |
| <b>Marine pollutant:</b> | NO   |               |         |
| <b>Labelling:</b>        | 8    |               |         |

**IATA / ICAO**

|                              |                     |               |   |
|------------------------------|---------------------|---------------|---|
| <b>UN no:</b>                | 2491                | <b>Class:</b> | 8 |
| <b>Packing group:</b>        | III                 |               |   |
| <b>Packing instructions:</b> | 818(P&CA); 820(CAO) |               |   |
| <b>Labelling:</b>            | 8                   |               |   |

**15. REGULATORY INFORMATION**

**Hazard symbols:** Harmful.



**Risk phrases:** R20: Harmful by inhalation.  
R36/37/38: Irritating to eyes, respiratory system and skin.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. OTHER INFORMATION**

**Legal disclaimer:** The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.