## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture
Name : Stone & Tile Intensive Cleaner
Product code : ECO/1

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

#### 1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use,Industrial use,Professional use
Use of the substance/mixture : Cleaning / stripper product

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

AM Robb Ltd
Tone Estate,
Milverton Road,
Wellington,
Somerset,
TA21 0AN

Tel: +44 (0) 1823 666213 Office hours only 8.30am–5.30pm Mon–Fri
Fax: +44 (0) 1823 665685
Email: info@ecoprotec.co.uk

### 1.4. Emergency telephone number

Emergency number : +44 (0) 1270 502891 (Out of Office Hours Emergency Number)

| Country | Organisation/Company | Address | Emergency number |
|---|---|---|---|
| Ireland | National Poisons Information Centre<br>Beaumont Hospital | Beaumont Hospital Beaumont Road<br>9 Dublin | : +353 1 8379964 |
| United Kingdom | National Poisons Information Service (NHS Direct) | http://www.npis.org | 111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland) |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Serious eye damage/eye irritation, Category 1 H318

Full text of hazard classes and H-statements : see section 16

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Xi; R36

Full text of R-phrases: see section 16

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

No labelling applicable

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger

Hazardous ingredients : 2,2'-iminodiethanol, diethanolamine, Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Hazard statements (CLP) : H318 - Causes serious eye damage

Precautionary statements (CLP) : P102 - Keep out of reach of children
P280 - Wear eye protection, protective clothing, protective gloves
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Child-resistant fastening : No

Tactile warning : No

**Nordic countries regulation**

### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes serious eye damage.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
|---|---|---|---|
| triethanolamine<br>substance with national workplace exposure limit(s) (AT, BE, CZ, DK, ES, FI, IE, IT, LT, PT) | (CAS No) 102-71-6<br>(EC no) 203-049-8<br>(REACH-no) 02-2119675504-34-XXXX | 5 - 15 | Not classified |
| Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide | (EC no) 932-051-8 | 1 - 5 | Xi; R38<br>Xi; R41 |
| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve | (CAS No) 111-76-2<br>(EC no) 203-905-0<br>(EC index no) 603-014-00-0<br>(REACH-no) 01-2119475108-36-XXXX | 1 - 5 | Xn; R20/21/22<br>Xi; R36/38 |
| 2,2'-iminodiethanol, diethanolamine | (CAS No) 111-42-2<br>(EC no) 203-868-0<br>(EC index no) 603-071-00-1 | 1 - 5 | Xn; R22<br>Xn; R48/22<br>Xi; R41<br>Xi; R38 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| triethanolamine<br>substance with national workplace exposure limit(s) (AT, BE, CZ, DK, ES, FI, IE, IT, LT, PT) | (CAS No) 102-71-6<br>(EC no) 203-049-8<br>(REACH-no) 02-2119675504-34-XXXX | 5 - 15 | Not classified |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide | (EC no) 932-051-8 | 1 - 5 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Aquatic Chronic 3, H412 |
| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve | (CAS No) 111-76-2<br>(EC no) 203-905-0<br>(EC index no) 603-014-00-0<br>(REACH-no) 01-2119475108-36-XXXX | 1 - 5 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319 |
| 2,2'-iminodiethanol, diethanolamine | (CAS No) 111-42-2<br>(EC no) 203-868-0<br>(EC index no) 603-071-00-1 | 1 - 5 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT RE 2, H373 |

Full text of R- and H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after eye contact : Serious damage to eyes.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | | |
|---|---|---|
| EU | Local name | 2-Butoxyethanol |
| EU | IOELV TWA (mg/m³) | 98 mg/m³ |
| EU | IOELV TWA (ppm) | 20 ppm |
| EU | IOELV STEL (mg/m³) | 246 mg/m³ |
| EU | IOELV STEL (ppm) | 50 ppm |
| EU | Notes | Skin |
| Austria | Local name | 2-Butoxyethanol |
| Austria | MAK (mg/m³) | 98 mg/m³ |
| Austria | MAK (ppm) | 20 ppm |
| Austria | MAK Short time value (mg/m³) | 200 mg/m³ |
| Austria | MAK Short time value (ppm) | 40 ppm |
| Austria | Remark (AT) | H |
| Belgium | Local name | 2-Butoxyéthanol |
| Belgium | Limit value (mg/m³) | 98 mg/m³ |
| Belgium | Limit value (ppm) | 20 ppm |
| Belgium | Short time value (mg/m³) | 246 mg/m³ |
| Belgium | Short time value (ppm) | 50 ppm |
| Belgium | Remark (BE) | D |
| Bulgaria | Local name | 2-Бутоксиетанол• |
| Bulgaria | OEL TWA (mg/m³) | 98 mg/m³ |
| Bulgaria | OEL STEL (mg/m³) | 246 mg/m³ |
| Croatia | Local name | 2-Butoksietanol; (Etilen-glikol monobutil-eter; butilov celosolv) |
| Croatia | GVI (granična vrijednost izloženosti) (mg/m³) | 98 mg/m³ |
| Croatia | GVI (granična vrijednost izloženosti) (ppm) | 20 ppm |
| Croatia | KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³) | 246 mg/m³ |
| Croatia | KGVI (kratkotrajna granična vrijednost izloženosti) (ppm) | 50 ppm |
| Croatia | Naznake (HR) | K, EU* Xn |
| Czech Republic | Local name | 2-Butoxyethanol |
| Czech Republic | Expoziční limity (PEL) (mg/m³) | 100 mg/m³ |
| Czech Republic | Expoziční limity (PEL) (ppm) | 21 ppm |
| Czech Republic | Expoziční limity (NPK-P) (mg/m³) | 200 mg/m³ |
| Czech Republic | Expoziční limity (NPK-P) (ppm) | 41 ppm |
| Czech Republic | Remark (CZ) | D |

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | | |
|---|---|---|
| Denmark | Local name | Butylglycol (2000) |
| Denmark | Grænseværdie (langvarig) (mg/m³) | 98 mg/m³ |
| Denmark | Grænseværdie (langvarig) (ppm) | 20 ppm |
| Denmark | Anmærkninger (DK) | EH |
| Finland | Local name | 2-Butoksietanoli |
| Finland | HTP-arvo (8h) (mg/m³) | 98 mg/m³ |
| Finland | HTP-arvo (8h) (ppm) | 20 ppm |
| Finland | HTP-arvo (15 min) | 250 mg/m³ |
| Finland | HTP-arvo (15 min) (ppm) | 50 ppm |
| France | Local name | 2-Butoxyéthanol |
| France | VME (mg/m³) | 49 mg/m³ |
| France | VME (ppm) | 2 ppm |
| France | VLE (mg/m³) | 246 mg/m³ |
| France | VLE (ppm) | 30 ppm |
| Germany | Local name | 2-Butoxy-ethanol |
| Germany | TRGS 900 Occupational exposure limit value (mg/m³) | 49 mg/m³ |
| Germany | TRGS 900 Occupational exposure limit value (ppm) | 10 ppm |
| Germany | Remark (TRGS 900) | DFG,EU,H,Y |
| Greece | OEL TWA (mg/m³) | 120 mg/m³ |
| Greece | OEL TWA (ppm) | 25 ppm |
| Hungary | Local name | 2-BUTOXIETANOL |
| Hungary | AK-érték | 98 mg/m³ |
| Hungary | CK-érték | 246 mg/m³ |
| Hungary | Megjegyzések (HU) | b, i; II.1. |
| Ireland | Local name | 2-Butoxyethanol (EGBE) |
| Ireland | OEL (8 hours ref) (mg/m³) | 98 mg/m³ |
| Ireland | OEL (8 hours ref) (ppm) | 20 ppm |
| Ireland | OEL (15 min ref) (mg/m3) | 246 mg/m³ |
| Ireland | OEL (15 min ref) (ppm) | 50 ppm |
| Ireland | Notes (IE) | Sk , IOELV |
| Italy | Local name | Butossietanolo-2 |
| Italy | OEL TWA (mg/m³) | 98 mg/m³ |
| Italy | OEL TWA (ppm) | 20 ppm |
| Italy | OEL STEL (mg/m³) | 246 mg/m³ |
| Italy | OEL STEL (ppm) | 50 ppm |
| Latvia | Local name | 2-Butoksietanols, (etilēnglikola monobutilēteris, Butilcelosolvs) |
| Latvia | OEL TWA (mg/m³) | 98 mg/m³ |
| Latvia | OEL TWA (ppm) | 20 ppm |
| Lithuania | Local name | Etilenglikolio monobutileteris (butilglikolis, 2-butoksietanolis) |
| Lithuania | IPRV (mg/m³) | 50 mg/m³ |
| Lithuania | IPRV (ppm) | 10 ppm |

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | | |
|---|---|---|
| Lithuania | TPRV (mg/m³) | 100 mg/m³ |
| Lithuania | TPRV (ppm) | 20 ppm |
| Lithuania | Remark (LT) | O |
| Luxembourg | Local name | 2-Butoxyéthanol |
| Luxembourg | OEL TWA (mg/m³) | 98 mg/m³ |
| Luxembourg | OEL TWA (ppm) | 20 ppm |
| Luxembourg | OEL STEL (mg/m³) | 246 mg/m³ |
| Luxembourg | OEL STEL (ppm) | 50 ppm |
| Malta | Local name | 2-Butoxyethanol |
| Malta | OEL TWA (mg/m³) | 98 mg/m³ |
| Malta | OEL TWA (ppm) | 20 ppm |
| Malta | OEL STEL (mg/m³) | 246 mg/m³ |
| Malta | OEL STEL (ppm) | 50 ppm |
| Netherlands | Local name | 2-Butoxyethanol |
| Netherlands | Grenswaarde TGG 8H (mg/m³) | 100 mg/m³ |
| Netherlands | Grenswaarde TGG 8H (ppm) | 20 ppm (2-Butoxyethanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value) |
| Netherlands | Grenswaarde TGG 15MIN (mg/m³) | 246 mg/m³ |
| Netherlands | Grenswaarde TGG 15MIN (ppm) | 50 ppm (2-Butoxyethanol; Netherlands; Short time value; Public occupational exposure limit value) |
| Netherlands | Remark (MAC) | H |
| Poland | Local name | 2-Butoksyetanol (butoksyetylowy alkohol) |
| Poland | NDS (mg/m³) | 98 mg/m³ |
| Poland | NDSCh (mg/m³) | 200 mg/m³ |
| Portugal | Local name | 2-Butoxietanol (EGBE) |
| Portugal | OEL TWA (ppm) | 20 ppm |
| Slovenia | Local name | 2-butoksietanol (butilglikol) |
| Slovenia | OEL TWA (mg/m³) | 98 mg/m³ |
| Slovenia | OEL TWA (ppm) | 20 ppm |
| Slovenia | OEL STEL (mg/m³) | 245 mg/m³ |
| Slovenia | OEL STEL (ppm) | 50 ppm |
| Spain | Local name | 2-Butoxietanol (Butil cellosolve; Éter monobutílico del etilenglicol) |
| Spain | VLA-ED (mg/m³) | 98 mg/m³ |
| Spain | VLA-ED (ppm) | 20 ppm |
| Spain | VLA-EC (mg/m³) | 245 mg/m³ |
| Spain | VLA-EC (ppm) | 50 ppm |

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | | |
|---|---|---|
| Spain | Notes | Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para elcontenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización delcontrol biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 deeste documento.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados,estos valores tienen la misma validez que el resto de los valores adoptados por el país.), VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento.) |
| Sweden | Local name | Ethylene glycol monobutyl ether |
| Sweden | nivågränsvärde (NVG) (mg/m³) | 50 mg/m³ |
| Sweden | nivågränsvärde (NVG) (ppm) | 10 ppm |
| Sweden | kortidsvärde (KTV) (mg/m³) | 100 mg/m³ |
| Sweden | kortidsvärde (KTV) (ppm) | 20 ppm |
| United Kingdom | Local name | 2-Butoxyethanol |
| United Kingdom | WEL TWA (mg/m³) | 123 mg/m³ |
| United Kingdom | WEL TWA (ppm) | 25 ppm |
| United Kingdom | WEL STEL (mg/m³) | 246 mg/m³ |
| United Kingdom | WEL STEL (ppm) | 50 ppm |
| United Kingdom | Remark (WEL) | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2) |
| Norway | Local name | 2-Butoksyetanol |
| Norway | Grenseverdier (AN) (mg/m³) | 50 mg/m³ |
| Norway | Grenseverdier (AN) (ppm) | 10 ppm |
| Norway | Merknader (NO) | H |
| Switzerland | Local name | 2-Butoxyéthanol |
| Switzerland | VME (mg/m³) | 49 mg/m³ |
| Switzerland | VME (ppm) | 10 ppm |
| Switzerland | VLE (mg/m³) | 98 mg/m³ |
| Switzerland | VLE (ppm) | 20 ppm |
| Switzerland | Remark (CH) | 4x15 |
| Australia | Local name | 2-Butoxyethanol |
| Australia | TWA (mg/m³) | 96,9 mg/m³ |
| Australia | TWA (ppm) | 20 ppm |
| Australia | STEL (mg/m³) | 242 mg/m³ |
| Australia | STEL (ppm) | 50 ppm |
| USA - ACGIH | Local name | 2-Butoxyethanol (EGBE) |
| USA - ACGIH | ACGIH TWA (ppm) | 20 ppm |
| USA - ACGIH | Remark (ACGIH) | Eye & URT irr |
| USA - OSHA | Local name | 2-Butoxyethanol |

| | | |
|---|---|---|
| **2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2)** | | |
| USA - OSHA | OSHA PEL (TWA) (mg/m³) | 240 mg/m³ |
| USA - OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |
| **2,2'-iminodiethanol, diethanolamine (111-42-2)** | | |
| Austria | Local name | Diethanolamin |
| Austria | MAK (mg/m³) | 2 mg/m³ |
| Austria | MAK (ppm) | 0,46 ppm |
| Austria | MAK Short time value (mg/m³) | 4 mg/m³ |
| Austria | MAK Short time value (ppm) | 0,92 ppm |
| Austria | Remark (AT) | H,Sh |
| Belgium | Local name | Diéthanolamine |
| Belgium | Limit value (mg/m³) | 2 mg/m³ |
| Belgium | Limit value (ppm) | 0,46 ppm |
| Belgium | Remark (BE) | D |
| Bulgaria | Local name | Диетаноламин |
| Bulgaria | OEL TWA (mg/m³) | 10 mg/m³ |
| Croatia | Local name | 2,2'-iminodietanol; (dietanolamin) |
| Croatia | GVI (granična vrijednost izloženosti) (mg/m³) | 15 mg/m³ |
| Croatia | GVI (granična vrijednost izloženosti) (ppm) | 3 ppm |
| Croatia | Naznake (HR) | Xn |
| Czech Republic | Local name | Diethanolamin |
| Czech Republic | Expoziční limity (PEL) (mg/m³) | 5 mg/m³ |
| Czech Republic | Expoziční limity (PEL) (ppm) | 1,2 ppm |
| Czech Republic | Expoziční limity (NPK-P) (mg/m³) | 10 mg/m³ |
| Czech Republic | Expoziční limity (NPK-P) (ppm) | 2,3 ppm |
| Czech Republic | Remark (CZ) | P |
| Denmark | Local name | Diethanolamin (1996) |
| Denmark | Grænseværdie (langvarig) (mg/m³) | 2 mg/m³ |
| Denmark | Grænseværdie (langvarig) (ppm) | 0,46 ppm |
| Denmark | Anmærkninger (DK) | H |
| Estonia | Local name | Dietanoolamiin |
| Estonia | OEL TWA (mg/m³) | 5 mg/m³ |
| Estonia | OEL TWA (ppm) | 3 ppm |
| Estonia | OEL STEL (mg/m³) | 30 mg/m³ |
| Estonia | OEL STEL (ppm) | 6 ppm |
| Finland | Local name | Dietanoliamiini |
| Finland | HTP-arvo (8h) (mg/m³) | 2 mg/m³ |
| Finland | HTP-arvo (8h) (ppm) | 0,46 ppm |
| France | Local name | Diéthanolamine |
| France | VME (mg/m³) | 15 mg/m³ |
| France | VME (ppm) | 3 ppm |
| Greece | OEL TWA (mg/m³) | 15 mg/m³ |
| Greece | OEL TWA (ppm) | 3 ppm |
| Lithuania | Local name | Dietanolaminas |
| Lithuania | IPRV (mg/m³) | 15 mg/m³ |
| Lithuania | IPRV (ppm) | 3 ppm |

| 2,2'-iminodiethanol, diethanolamine (111-42-2) | | |
|---|---|---|
| Lithuania | TPRV (mg/m³) | 30 mg/m³ |
| Lithuania | TPRV (ppm) | 6 ppm |
| Lithuania | Remark (LT) | O |
| Poland | Local name | 2,2'-Iminodietanol |
| Poland | NDS (mg/m³) | 9 mg/m³ |
| Portugal | Local name | Dietanolamina |
| Portugal | OEL TWA (mg/m³) | 2 mg/m³ |
| Slovenia | Local name | dietanolamin |
| Slovenia | OEL TWA (mg/m³) | 15 mg/m³ |
| Spain | Local name | Dietanolamina |
| Spain | VLA-ED (mg/m³) | 2 mg/m³ |
| Spain | VLA-ED (ppm) | 0,46 ppm |
| Spain | Notes | Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para elcontenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización delcontrol biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 deeste documento.), f (Reacciona con agentes nitrosantes que pueden dar lugar a la formación de N-Nitrosaminas carcinógenas.) |
| Sweden | Local name | Diethanolamine |
| Sweden | nivågränsvärde (NVG) (mg/m³) | 5 mg/m³ |
| Sweden | nivågränsvärde (NVG) (ppm) | 3 ppm |
| Sweden | kortidsvärde (KTV) (mg/m³) | 30 mg/m³ |
| Sweden | kortidsvärde (KTV) (ppm) | 6 ppm |
| Norway | Local name | 2,2'-Iminodietanol |
| Norway | Grenseverdier (AN) (mg/m³) | 15 mg/m³ |
| Norway | Grenseverdier (AN) (ppm) | 3 ppm |
| Switzerland | Local name | Diéthanolamine |
| Switzerland | VME (mg/m³) | 1 mg/m³ |
| Switzerland | VLE (mg/m³) | 1 mg/m³ |
| Switzerland | Remark (CH) | 15 min |
| Australia | Local name | Diethanolamine |
| Australia | TWA (mg/m³) | 13 mg/m³ |
| Australia | TWA (ppm) | 3 ppm |
| USA - ACGIH | Local name | Diethanolamine |
| USA - ACGIH | ACGIH TWA (mg/m³) | 1 mg/m³ |
| USA - ACGIH | Remark (ACGIH) | Liver & kidney dam |
| **triethanolamine (102-71-6)** | | |
| Austria | Local name | Triethanolamin |
| Austria | MAK (mg/m³) | 5 mg/m³ |
| Austria | MAK (ppm) | 0,8 ppm |
| Austria | MAK Short time value (mg/m³) | 10 mg/m³ |
| Austria | MAK Short time value (ppm) | 1,6 ppm |
| Austria | Remark (AT) | S |
| Belgium | Local name | Triéthanolamine |
| Belgium | Limit value (mg/m³) | 5 mg/m³ |

| triethanolamine (102-71-6) | | |
|---|---|---|
| Czech Republic | Local name | Triethanolamin |
| Czech Republic | Expoziční limity (PEL) (mg/m³) | 5 mg/m³ |
| Czech Republic | Expoziční limity (PEL) (ppm) | 0,8 ppm |
| Czech Republic | Expoziční limity (NPK-P) (mg/m³) | 10 mg/m³ |
| Czech Republic | Expoziční limity (NPK-P) (ppm) | 1,6 ppm |
| Denmark | Local name | Triethanolamin (1994) |
| Denmark | Grænseværdie (langvarig) (mg/m³) | 3,1 mg/m³ |
| Denmark | Grænseværdie (langvarig) (ppm) | 0,5 ppm |
| Estonia | Local name | Trietanoolamiin |
| Estonia | OEL TWA (mg/m³) | 5 mg/m³ |
| Estonia | OEL STEL (mg/m³) | 10 mg/m³ |
| Finland | Local name | Trietanoliamiini |
| Finland | HTP-arvo (8h) (mg/m³) | 5 mg/m³ |
| Ireland | Local name | Triethanolamine |
| Ireland | OEL (8 hours ref) (mg/m³) | 5 mg/m³ |
| Lithuania | Local name | Trietanolaminas |
| Lithuania | IPRV (mg/m³) | 5 mg/m³ |
| Lithuania | TPRV (mg/m³) | 10 mg/m³ |
| Lithuania | Remark (LT) | J |
| Portugal | Local name | Trietanolamina |
| Portugal | OEL TWA (mg/m³) | 5 mg/m³ |
| Slovenia | Local name | 2,2',2"-nitrilotrietanol |
| Slovenia | OEL TWA (mg/m³) | 5 mg/m³ |
| Spain | Local name | Trietanolamina |
| Spain | VLA-ED (mg/m³) | 5 mg/m³ |
| Iceland | Local name | Tríetanólamín |
| Iceland | OEL (8 hours ref) (mg/m³) | 5 mg/m³ |
| Iceland | Notes (IS) | O |
| Norway | Local name | Trietanolamin |
| Norway | Grenseverdier (AN) (mg/m³) | 5 mg/m³ |
| Switzerland | Local name | Triéthanolamine* |
| Switzerland | VME (mg/m³) | 5 mg/m³ |
| Switzerland | VLE (mg/m³) | 20 mg/m³ |
| Switzerland | Remark (CH) | 4x15* |
| Australia | Local name | Triethanolamine |
| Australia | TWA (mg/m³) | 5 mg/m³ |
| USA - ACGIH | Local name | Triethanolamine |
| USA - ACGIH | ACGIH TWA (mg/m³) | 5 mg/m³ |
| USA - ACGIH | Remark (ACGIH) | Eye & skin irr |

### 8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work station.

Personal protective equipment : Protective clothing. Protective goggles. Gloves.

| | | |
|---|---|---|
| Hand protection | : | Protective gloves |
| Eye protection | : | Safety glasses |
| Skin and body protection | : | Wear suitable protective clothing |
| Respiratory protection | : | In case of insufficient ventilation, wear suitable respiratory equipment |

| | | |
|---|---|---|
| Environmental exposure controls | : | Avoid release to the environment. |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Appearance | : | Liquid. |
| Colour | : | white. |
| Odour | : | characteristic. |
| Odour threshold | : | No data available |
| pH | : | 9 - 11 |
| Relative evaporation rate (butylacetate=1) | : | No data available |
| Melting point | : | Not applicable |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Vapour pressure | : | No data available |
| Relative vapour density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Density | : | 1 - 1,04 g/cm³ |
| Solubility | : | Soluble in water. |
| Log Pow | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosive properties | : | No data available |
| Oxidising properties | : | No data available |
| Explosive limits | : | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| LD50 oral rat | 1746 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity) |
| LC50 inhalation rat (mg/l) | 2,2 mg/l/4h (Rat; Experimental value) |
| LC50 inhalation rat (ppm) | 450 ppm/4h (Rat; Experimental value) |

| 2,2'-iminodiethanol, diethanolamine (111-42-2) | |
|---|---|
| LD50 oral rat | 620 mg/kg (Rat) |
| LD50 dermal rabbit | 7640 mg/kg (Rabbit) |

| Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide | |
|---|---|
| LD50 oral rat | 2240 mg/kg |

| triethanolamine (102-71-6) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 6400 mg/kg bodyweight; Rat) |
| LD50 dermal rat | > 5000 mg/kg (Rat) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit) |

Skin corrosion/irritation : Not classified
pH: 9 - 11

Serious eye damage/irritation : Causes serious eye damage.
pH: 9 - 11

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| LC50 fish 1 | 1474 ppm (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Static system; Fresh water; Experimental value) |
| EC50 Daphnia 1 | 1550 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value) |
| Threshold limit algae 1 | 911 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value) |

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| Threshold limit algae 2 | 88 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value) |

| 2,2'-iminodiethanol, diethanolamine (111-42-2) | |
|---|---|
| LC50 fish 1 | 1664 mg/l (LC50; 96 h; Pimephales promelas) |
| EC50 Daphnia 2 | 55 mg/l (EC50; 48 h) |

| Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide | |
|---|---|
| LC50 fish 1 | 4,1 - 7,5 mg/l (96h) |
| EC50 Daphnia 1 | 8,8 mg/l (48h) |

| triethanolamine (102-71-6) | |
|---|---|
| LC50 fish 2 | 450 - 1000 mg/l (LC50; 96 h; Lepomis macrochirus) |

### 12.2. Persistence and degradability

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air. |

| 2,2'-iminodiethanol, diethanolamine (111-42-2) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. Biodegradable in soil. Photodegradation in the air. |
| Biochemical oxygen demand (BOD) | 0,22 g $O_2$/g substance |
| Chemical oxygen demand (COD) | 1,52 g $O_2$/g substance |
| ThOD | 2,13 g $O_2$/g substance |
| BOD (% of ThOD) | 0,10 |

| triethanolamine (102-71-6) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. Very mobile in soil. Photolysis in the air. |
| Biochemical oxygen demand (BOD) | 0,02 g $O_2$/g substance |
| Chemical oxygen demand (COD) | 1,50 g $O_2$/g substance |
| ThOD | 2,04 g $O_2$/g substance |
| BOD (% of ThOD) | 0,02 |

### 12.3. Bioaccumulative potential

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| Log Pow | 0,81 (Test data; 20 °C) |
| Bioaccumulative potential | Low bioaccumulation potential (Log Kow < 4). |

| 2,2'-iminodiethanol, diethanolamine (111-42-2) | |
|---|---|
| Log Pow | -2,18 - -1,43 (Experimental value) |
| Bioaccumulative potential | Bioaccumulation: Not applicable. |

| triethanolamine (102-71-6) | |
|---|---|
| BCF fish 1 | < <0.4-<3.9,BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 42 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value |
| Log Pow | -2,3 - 1,34 (Weight of evidence approach; -1; QSAR) |
| Bioaccumulative potential | Low bioaccumulation potential (BCF < 500). |

### 12.4. Mobility in soil

| 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve (111-76-2) | |
|---|---|
| Surface tension | 0,065 N/m (20 °C; Calculated value) |

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number** | | | | |
| Not dangerous goods in terms of transport regulations | | | | |
| **14.2. UN proper shipping name** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.3. Transport hazard class(es)** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.4. Packing group** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment : No | Dangerous for the environment : No<br>Marine pollutant : No | Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No |

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

#### 14.6.2. Transport by sea

#### 14.6.3. Air transport

#### 14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

Not subject to ADN : No

#### 14.6.5. Rail transport

Carriage prohibited (RID) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

| The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006: | |
|---|---|
| 3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 | Power Stripper - 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve |
| 3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 | Power Stripper - 2-butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

### 15.1.2. National regulations

**Germany**

Water hazard class (WGK) : 1 - low hazard to waters

WGK remark : Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Full text of R-, H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H412 | Harmful to aquatic life with long lasting effects |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed |
| R22 | Harmful if swallowed |
| R36 | Irritating to eyes |
| R36/38 | Irritating to eyes and skin |
| R38 | Irritating to skin |
| R41 | Risk of serious damage to eyes |
| R48/22 | Harmful: danger of serious damage to health by prolonged exposure if swallowed |
| Xi | Irritant |
| Xn | Harmful |

SDS EU_NSC

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*