Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name EpoKwick FC Hardener
Product Code(s) 20-3453-032
(M)SDS Number 1364499_E

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

Recommended Use Laboratory Use Only.
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer ITW Test & Measurement GmbH
Manufacturer Address Boschstraße 10
73734 Esslingen am Neckar / GERMANY
www.buehler-met.de www.buehler.fr www.buehler.co.uk
Phone number +49 (0) 711 490 46 90-0
E-mail Address lab.eu@buehler.com

1.4. Emergency telephone number

Global Access Code: 334545
Americas: +1 760 476 3962
Middle East/Africa: +1 760 476 3959
UK: +44 8 08 189 0979
Europe: +1 760 476 3961
Asia Pacific: +1 760 476 3960

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>H302 - Harmful if swallowed</th>
<th>H312 - Harmful in contact with skin</th>
<th>H314 - Causes severe skin burns and eye damage</th>
<th>H317 - May cause an allergic skin reaction</th>
<th>H331 - Toxic if inhaled</th>
<th>H335 - May cause respiratory irritation</th>
</tr>
</thead>
</table>

Signal word: Danger

Hazard Statements
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H331 - Toxic if inhaled
H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P281 - Use personal protective equipment as required
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
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 POISON CENTER or doctor/physician
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other hazards
No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.
3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EC No</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane</td>
<td>-</td>
<td>28063-82-3</td>
<td>&gt; 60%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Diethylene triamine</td>
<td>203-865-4</td>
<td>111-40-0</td>
<td>&lt; 30%</td>
<td>Acute Tox. 4 (H302)</td>
<td>Acute Tox. 4 (H312)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 2 (H331)</td>
<td>Skin Corr. 1B (H314)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1 (H317)</td>
<td>STOT SE 3 (H335)</td>
</tr>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], alpha.-hydro-.omega.-[(2-aminomethylethoxy)-ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)]</td>
<td>-</td>
<td>39423-51-3</td>
<td>5 - 15%</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>SVHC candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane</td>
<td>28063-82-3</td>
<td></td>
</tr>
<tr>
<td>Diethylene triamine</td>
<td>111-40-0</td>
<td></td>
</tr>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], alpha.-hydro-.omega.-[(2-aminomethylethoxy)-ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)]</td>
<td>39423-51-3</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice
Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation
If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Administer oxygen if breathing is difficult. Get immediate medical advice/attention. Delayed pulmonary edema may occur. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.

Skin contact
Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction.
Eye contact: Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).

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


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

Note to physicians: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization in susceptible persons. Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical: The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products: Carbon oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other Information
Refer to protective measures listed in Sections 7 and 8.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions
Environmental precautions
Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections
Reference to other sections
See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General Hygiene Considerations
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

7.3. Specific end use(s)
Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Exposure Limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EU</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine 111-40-0</td>
<td>-</td>
<td>STEL: 3 ppm TWA: 1 ppm TWA: 4 mg/m$^3$</td>
<td>TWA: 1 ppm TWA: 4 mg/m$^3$</td>
<td>via dérmica* TWA: 1 ppm TWA: 4.3 mg/m$^3$</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine 111-40-0</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
<td>-</td>
<td>TWA: 1 ppm TWA: 4.3 mg/m$^3$ STEL: 3 ppm STEL: 13 mg/m$^3$ via dérmica* TWA: 1 ppm TWA: 4 mg/m$^3$</td>
<td>TWA: 1 ppm TWA: 4 mg/m$^3$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine 111-40-0</td>
<td>TWA: 1 ppm TWA: 4 mg/m$^3$</td>
<td>H* TWA: 1 ppm TWA: 4 mg/m$^3$</td>
<td>P* STEL: 12 mg/m$^3$ TWA: 4 mg/m$^3$</td>
<td>TWA: 1 ppm TWA: 4 mg/m$^3$ H* STEL: 3 ppm STEL: 8 mg/m$^3$</td>
<td>TWA: 1 ppm TWA: 4 mg/m$^3$ STEL: 3 ppm STEL: 12 mg/m$^3$ Sk*</td>
</tr>
</tbody>
</table>

Derived No Effect Level (DNEL)  No information available

Predicted No Effect Concentration (PNEC)  No information available

8.2. Exposure controls

Personal protective equipment

- **Eye/face protection**  Face protection shield.
- **Hand Protection**  Wear suitable gloves. Impervious gloves.
- **Skin and body protection**  Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Environmental exposure controls  No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Amine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Alkaline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td></td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>$&gt; 200^\circ C$ °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>$&gt; 100^\circ C$ °C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>0 %</td>
</tr>
<tr>
<td>Liquid Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions: None under normal processing.

Hazardous Polymerization: Hazardous polymerization does not occur.

10.4. Conditions to avoid

Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Acids, Bases, Oxidizing agent.

10.6. Hazardous decomposition products
Carbon oxides.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

**Inhalation**
Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

**Eye contact**
Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact**
Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts. Harmful in contact with skin.

**Ingestion**
Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Information on toxicological effects

**Symptoms**

Numerical measures of toxicity

**Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral) 1,080.00 mg/kg
- ATEmix (dermal) 1,100.00 mg/kg
- ATEmix (inhalation-dust/mist) 70.00 mg/L

Unknown acute toxicity

- 100 % of the mixture consists of ingredient(s) of unknown toxicity
- 70 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 70 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
70 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine</td>
<td>1080 mg/kg (Rat)</td>
<td>672 mg/kg (Rabbit)</td>
<td>70 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine</td>
<td>72h EC50: = 1164 mg/L (Pseudokirchneriella subcapitata) 96h EC50: = 345.6 mg/L (Pseudokirchneriella subcapitata) 96h EC50: = 592 mg/L (Desmodesmus subspicatus)</td>
<td>96h LC50: = 430 mg/L (Leuciscus idus) 96h LC50: = 1014 mg/L (Poecilia reticulata) 96h LC50: = 248 mg/L (Poecilia reticulata)</td>
<td>EC50 = 2000 mg/L 1 h EC50 = 96 mg/L 17 h</td>
<td>24h EC50: = 37 mg/L 48h EC50: = 16 mg/L</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Persistence and Degradability  No information available.

12.3. Bioaccumulative potential

Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine</td>
<td>-1.3</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

Mobility in soil  No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment  No information available.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-(2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

Other adverse effects  No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products  Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging  Dispose of in accordance with federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1  UN-No.  UN2735
14.2  Proper Shipping Name  POLYAMINES, LIQUID, CORROSIVE, N.O.S.

Description  UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III

14.3  Hazard Class  8
14.4  Packing Group  III
14.5  Marine Pollutant  Not applicable
14.6  Special Provisions  None

EmS-No.  F-A, S-B
14.7  Transport in bulk according to Annex II of MARPOL and the IBC Code  No information available
RID
14.1 UN-No. UN2735
14.2 Proper Shipping Name POLYAMINES, LIQUID, CORROSIVE, N.O.S.
    Description UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III
14.3 Hazard Class II
14.4 Packing Group III
14.5 Environmental hazard Not applicable
14.6 Special Provisions None
    Classification code C7

ADR
14.1 UN-No. UN2735
14.2 Proper Shipping Name POLYAMINES, LIQUID, CORROSIVE, N.O.S.
    Description UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III, (E)
14.3 Hazard Class II
14.4 Packing Group III
14.5 Environmental hazard Not applicable
14.6 Special Provisions None 274
    Classification code C7
    Tunnel restriction code (E)

IATA
14.1 UN-No. UN2735
14.2 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.
    Description UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III
14.3 Hazard Class II
14.4 Packing Group III
14.5 Environmental hazard Not applicable
14.6 Special Provisions None

ERG Code 8L

Section 14: TRANSPORT INFORMATION

IMDG/IMO
14.1 UN-No. UN2735
14.2 Proper Shipping Name POLYAMINES, LIQUID, CORROSIVE, N.O.S.
    Description UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III
14.3 Hazard Class II
14.4 Packing Group III
14.5 Marine Pollutant Not applicable
14.6 Special Provisions None
    EmS-No. F-A, S-B
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

RID
14.1 UN-No. UN2735
14.2 Proper Shipping Name
Description
POLYAMINES, LIQUID, CORROSIVE, N.O.S.
UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III

14.3 Hazard Class
8

14.4 Packing Group
III

14.5 Environmental hazard
Not applicable

14.6 Special Provisions
None

Classification code
C7

ADR

14.1 UN-No.
UN2735

14.2 Proper Shipping Name
POLYAMINES, LIQUID, CORROSIVE, N.O.S.
UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III, (E)

14.3 Hazard Class
8

14.4 Packing Group
III

14.5 Environmental hazard
Not applicable

14.6 Special Provisions
None

Classification code
C7

Tunnel restriction code
(E)

IATA

14.1 UN-No.
UN2735

14.2 Proper Shipping Name
AMINES, LIQUID, CORROSIVE, N.O.S.
UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENE TRIAMINE), 8, III

14.3 Hazard Class
8

14.4 Packing Group
III

14.5 Environmental hazard
Not applicable

14.6 Special Provisions
None

ERG Code
8L

Section 15: REGULATORY INFORMATION

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

National regulations

France

Occupational Illnesses (R-463-3, France)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>French RG number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene triamine 111-40-0</td>
<td>RG 49, RG 49bis</td>
<td>-</td>
</tr>
</tbody>
</table>

Water hazard class (WGK) strongly hazardous to water (WGK 3)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH),
Annex XVII).

**Persistent Organic Pollutants**
Not applicable.

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**
Not applicable.

**International Inventories**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Complies</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Contact supplier for inventory compliance status.</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

**Legend**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment**

No information available.

**Section 16: OTHER INFORMATION**

**Key or legend to abbreviations and acronyms used in the safety data sheet**

- **Full text of H-Statements referred to under sections 2 and 3**
  - H302 - Harmful if swallowed
  - H312 - Harmful in contact with skin
  - H314 - Causes severe skin burns and eye damage
  - H317 - May cause an allergic skin reaction

**Legend**

- **SVHC**: Substances of Very High Concern for Authorization:

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Exposure Control</th>
<th>Description</th>
<th>Limit Value Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA</td>
<td>TWA (time-weighted average)</td>
<td>STEL</td>
</tr>
<tr>
<td>Ceiling</td>
<td>Maximum limit value</td>
<td>-</td>
</tr>
</tbody>
</table>

**Key literature references and sources for data**

www.ChemADVISOR.com/
This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

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End of Safety Data Sheet