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

1.1 Product identifier
Product name: ARALDITE STANDARD T HARDENER
Product code: 00068949
Product description:

1.2 Relevant identified uses of the substance or mixture and uses advised against
Product use: Hardener for adhesive systems

1.3 Details of the supplier of the safety data sheet
Supplier: Huntsman Advanced Materials (Europe)BVBA
Everslaan 45
3078 Everberg / Belgium
Tel.: +41 61 299 20 41
Fax: +41 61 299 20 40

e-mail address of person responsible for this SDS: Global_Product_EHS_AdMat@huntsman.com

1.4 Emergency telephone number
Supplier
Telephone number:
EUROPE: +32 35 75 1234
France ORFILA: +33(0)145425959
ASIA: +65 6336-6011
China: +86 20 39377888
Australia: 1800 786 152
New Zealand: 0800 767 437
USA: +1/800/424.9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition: Mixture
Classification according to Directive 1999/45/EC [DPD]
The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Classification:
Xi; R36/38
R43
R52/53

Human health hazards: Irritating to eyes and skin. May cause sensitisation by skin contact.

Environmental hazards: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements
Hazard symbol or symbols:

Indication of danger: Irritant

Date of issue / Date of revision: 14 June 2011
SECTION 2: Hazards identification

Risk phrases: R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: S2- Keep out of the reach of children.
S24- Avoid contact with skin.
S37- Wear suitable gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

Hazardous ingredients: polyamide resin
triethylenetetramine
tetraethylenepentamine

Supplemental label elements: Not applicable.

Special packaging requirements: Containers to be fitted with child-resistant fastenings: Not applicable.
Tactile warning of danger: Not applicable.

2.3 Other hazards
Other hazards which do not result in classification: Not available.

SECTION 3: Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>67/548/EEC</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>polyamide resin</td>
<td>-</td>
<td>30 - 60</td>
<td>Xi; R36/38</td>
<td>Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R43</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R52/53</td>
<td></td>
</tr>
<tr>
<td>triethylenetetramine</td>
<td>CAS: 112-24-3</td>
<td>3 - 7</td>
<td>Xn; R21</td>
<td>Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C; R34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R43</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R52/53</td>
<td></td>
</tr>
<tr>
<td>tetraethylenepentamine</td>
<td>CAS: 112-57-2</td>
<td>3 - 7</td>
<td>Xn; R21/22</td>
<td>Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td></td>
<td>Index: 612-060-0-0</td>
<td></td>
<td>C; R34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R43</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N; R51/53</td>
<td></td>
</tr>
<tr>
<td>pentaethylenehexamine</td>
<td>CAS: 4067-16-7</td>
<td>0.1 - 1</td>
<td>C; R34</td>
<td>Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td></td>
<td>Index: 612-064-0-0</td>
<td></td>
<td>R43</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N; R50/53</td>
<td></td>
</tr>
</tbody>
</table>
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Type**

[1] Substance classified with a health or environmental hazard  
[2] Substance with a workplace exposure limit  

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures**

### 4.1 Description of first aid measures

**Eye contact**  
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation**  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**  
Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders**  
No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

**Potential acute health effects**

**Eye contact**  
Irritating to eyes.

**Inhalation**  
Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**  
Irritating to skin. May cause sensitisation by skin contact.
SECTION 4: First aid measures

**Ingestion**: Irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms**

- **Eye contact**
  - Adverse symptoms may include the following:
    - irritation
    - watering
    - redness

- **Inhalation**
  - No specific data.

- **Skin contact**
  - Adverse symptoms may include the following:
    - irritation
    - redness

- **Ingestion**
  - No specific data.

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

- **Notes to physician**
  - In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

- **Specific treatments**
  - Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours.

SECTION 5: Firefighting measures

**5.1 Extinguishing media**

- **Suitable extinguishing media**
  - Use an extinguishing agent suitable for the surrounding fire.

- **Unsuitable extinguishing media**
  - None known.

**5.2 Special hazards arising from the substance or mixture**

- **Hazards from the substance or mixture**
  - In a fire or if heated, a pressure increase will occur and the container may burst.

- **Hazardous thermal decomposition products**
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - nitrogen oxides

**5.3 Advice for firefighters**

- **Special precautions for fire-fighters**
  - Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- **Special protective equipment for fire-fighters**
  - Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

- **For non-emergency personnel**
  - No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- **For emergency responders**
  - If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions

- Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

6.3 Methods and materials for containment and cleaning up

- **Small spill**
  - Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **Large spill**
  - Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

- See Section 1 for emergency contact information.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- **Protective measures**
  - Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- **Advice on general occupational hygiene**
  - Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Storage hazard class

Huntsman Advanced Materials

Storage class 12, Liquids, not dangerous

7.3 Specific end use(s)

Recommendations

Not available.

Industrial sector specific solutions

Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin protection
SECTION 8: Exposure controls/personal protection

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Material of gloves for long term application (BTT>480min):
- butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL)

Material of gloves for short term/splash application (10min<BTT<480min):
- nitrile rubber

Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers. Additional information can be found for instance at www.gisbau.de.

Body protection
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellowish</td>
</tr>
<tr>
<td>Odour</td>
<td>Amine-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: &gt;150°C [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)]</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Burning time</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Burning rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not available</td>
</tr>
</tbody>
</table>
SECTION 9: Physical and chemical properties

Water solubility : 20 deg C
  Insoluble
Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Dynamic: 25000 to 30000 mPa·s
Explosive properties : Not available.
Oxidising properties : Not available.

9.2 Other information
Density : 0.97 g/cm³ [25°C (77°F)]

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
  Carbon oxides, Nitrogen oxides, Burning produces obnoxious and toxic fumes.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Endpoint</th>
<th>Species</th>
<th>Result</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARALDITE STANDARD T HARDENER triethylenetetramine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit - Male, Female</td>
<td>1465 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rabbit - Male, Female</td>
<td>1716 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARALDITE STANDARD T HARDENER triethylenetetramine</td>
<td>OECD 406 Skin Sensitization</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
</tbody>
</table>
SECTION 11: Toxicological information

### Conclusion/Summary
- Not available.

### Mutagenicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>triethylenetetramine</td>
<td>-</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative</td>
</tr>
</tbody>
</table>

### Carcinogenicity
- Not available.

### Reproductive toxicity
- Not available.

### Teratogenicity
- Not available.

### Information on the likely routes of exposure
- Not available.

### Potential acute health effects
- **Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- **Ingestion**: Irritating to mouth, throat and stomach.
- **Skin contact**: Irritating to skin. May cause sensitisation by skin contact.
- **Eye contact**: Irritating to eyes.

### Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Test</th>
<th>Conclusion/Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Carcinogenicity
- Positive

### Mutagenicity
- Negative

### Teratogenicity
- Not available.

### Reproductive toxicity
- Not available.

### Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>Test</th>
<th>Conclusion/Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Test</th>
<th>Conclusion/Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

#### Long term exposure

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

### Potential chronic health effects

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result type</th>
<th>Result</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>triethylenetetramine</td>
<td>-</td>
<td>NOAEL</td>
<td>50 mg/kg/d</td>
<td>-</td>
</tr>
</tbody>
</table>

### Conclusion/Summary
- Not available.

### General
- Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

### Carcinogenicity
- No known significant effects or critical hazards.

### Mutagenicity
- No known significant effects or critical hazards.

### Teratogenicity
- No known significant effects or critical hazards.
SECTION 11: Toxicological information

Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Other information: Not available.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Soil/water partition coefficient (Koc): Not available.
Mobility: Not available.

12.5 Results of PBT and vPvB assessment
Not applicable.

12.6 Other adverse effects: No known significant effects or critical hazards.

12.7 Other ecological information

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

<table>
<thead>
<tr>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>European waste catalogue (EWC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste code</td>
</tr>
<tr>
<td>07 02 04*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.</td>
</tr>
</tbody>
</table>
**SECTION 13: Disposal considerations**

**Special precautions**: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>ADN/ADNR</td>
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</tr>
<tr>
<td>IMDG</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated.</td>
</tr>
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<table>
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<th>14.3 Transport hazard class(es)</th>
<th>ADR/RID</th>
<th>ADN/ADNR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
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<tr>
<th>14.4 Packing group</th>
<th>ADR/RID</th>
<th>ADN/ADNR</th>
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<th>IATA</th>
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<th>14.5 Environmental hazards</th>
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<td>No.</td>
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<th>14.6 Special precautions for user</th>
<th>ADR/RID</th>
<th>ADN/ADNR</th>
<th>IMDG</th>
<th>IATA</th>
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<thead>
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<th>Additional information</th>
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<th>IATA</th>
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</table>

**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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Not applicable.

**Other EU regulations**

**Europe inventory**: All components are listed or exempted.

**Black List Chemicals**: Not listed

**Priority List Chemicals**: Not listed
SECTION 15: Regulatory information

Integrated pollution prevention and control list (IPPC) - Air: Not listed
Integrated pollution prevention and control list (IPPC) - Water: Not listed

National regulations

References: The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974.

International regulations

Chemical Weapons Convention List Schedule I Chemicals: Not listed
Chemical Weapons Convention List Schedule II Chemicals: Not listed
Chemical Weapons Convention List Schedule III Chemicals: Not listed

15.2 Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Aquatic Chronic 3, H412

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
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<tr>
<td>Skin Corr. 1B, H314</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Aquatic Chronic 3, H412</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements:
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

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SECTION 16: Other information

H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

- Acute Tox. 4, H302: ACUTE TOXICITY: ORAL - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY: SKIN - Category 4
- Aquatic Acute 1, H400: AQUATIC TOXICITY (ACUTE) - Category 1
- Aquatic Chronic 1, H410: AQUATIC TOXICITY (CHRONIC) - Category 1
- Aquatic Chronic 2, H411: AQUATIC TOXICITY (CHRONIC) - Category 2
- Aquatic Chronic 3, H412: AQUATIC TOXICITY (CHRONIC) - Category 3
- Eye Dam. 1, H318: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Skin Corr. 1B, H314: SKIN CORROSION/IRRITATION - Category 1B
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317: SKIN SENSITIZATION - Category 1

Full text of abbreviations R phrases

- R21- Harmful in contact with skin.
- R21/22- Harmful in contact with skin and if swallowed.
- R34- Causes burns.
- R36/38- Irritating to eyes and skin.
- R43- May cause sensitisation by skin contact.
- R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD]

- C - Corrosive
- Xn - Harmful
- Xi - Irritant
- N - Dangerous for the environment

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