1. Identification of the Substance / Preparation and of the Company

1.1. Product identifier
Martin SMD adhesive D 125 F-DR

Contains:
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)
Epoxy resin
Neodecanoic acid, oxiranylmethyl ester
RP Bisphenol F-epichlorohydrin resin, MW<=700

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use: Epoxy adhesive

1.3 Company/Undertaking Identification
MARTIN GmbH
Industriestrasse 17
D- 82110 Germering
Phone: +49 [0]89 8941898-0
Fax: +49 [0]89 8941898-19
www.martin-smt.de

1.4 Emergency Telephone
Please contact the nearest poison emergency center.

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification (CLP):

<table>
<thead>
<tr>
<th>Skin irritation</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315 Causes skin irritation.</td>
<td></td>
</tr>
<tr>
<td>Serious eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>H319 Causes serious eye irritation.</td>
<td></td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td>Category 1</td>
</tr>
<tr>
<td>H317 May cause an allergic skin reaction.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>H341 Suspected of causing genetic defects.</td>
<td></td>
</tr>
<tr>
<td>Chronic hazards to the aquatic environment</td>
<td>Category 2</td>
</tr>
<tr>
<td>H411 Toxic to aquatic life with long lasting effects.</td>
<td></td>
</tr>
</tbody>
</table>

2.2
Label elements

Label elements (CLP):

Hazard pictogram:

- Warning
- Caution
- Hazardous substances

Signal word: Warning

Hazard statement:
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H319 Suspected of causing genetic defects.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statement:

Prevention

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing.

Precautionary statement:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

Response

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

None if used properly.

3. Composition of / Information on Ingredients

General chemical description: Adhesive

Base substances of preparation: Epoxy resin

Declaration of the ingredients according to CLP (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>EC Number</th>
<th>content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700)</td>
<td>500-033-5, 01-2119456619-26</td>
<td>&gt;= 25- &lt; 50 %</td>
<td>Serious eye irritation 2 H319, Skin irritation 2 H315, Skin sensitizer 1 H317, Chronic hazards to the aquatic environment 2 H411</td>
</tr>
<tr>
<td>Epoxy resin</td>
<td>500-210-7</td>
<td>&gt;= 5- &lt; 10 %</td>
<td>Skin sensitizer 1 H317</td>
</tr>
</tbody>
</table>

Martin GmbH
Industriestrasse 17
D- 82110 Germering / Germany
Carlotta Baumann

Martin GmbH
Amtsgericht München
HRB 87040
Ust.-Id.-Nr. DE 128 235 758
WEEE-Nr. DE 22908382

Uni Credit Bank AG
Konto 606 815 751
BIC HYVEDEMM405
IBAN DE 15700932000006556787

Fon +49 (0)89 8941898-0
Fax +49 (0)89 8941898-19
info@martin-smt.de
www.martin-smt.de
4. First Aid Measures

4.1. Description of first aid measures

Inhalation: Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

Skin contact: Rinse with running water and soap. Obtain medical attention if irritation persists.

Eye contact: Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion: Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

See section: Description of first aid

5. Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media: water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons: High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.
5.3. **Advice for firefighters**
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional information:**
In case of fire, keep containers cool with water spray.

---

### 6. Accidental Release Measures

6.1. **Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin and eyes.
Wear protective equipment.

6.2. **Environmental precautions**
Do not empty into drains / surface water / ground water.

6.3. **Methods and material for containment and cleaning up**
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. **Reference to other sections**
See advice in chapter 8

---

### 7. Handling and Storage

7.1. **Precautions for safe handling**
Avoid skin and eye contact.
See advice in chapter 8

**Hygiene measures:**
Good industrial hygiene practices should be observed.
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. **Conditions for safe storage, including any incompatibilities**
Ensure good ventilation/extraction.
Keep container tightly sealed.
Store at room temperature.

7.3. **Specific end use(s)**
Epoxy adhesive

---

### 8. Exposure Controls and Personal Protective Equipment

8.1. **Control parameters**
Occupational Exposure Limits
Valid for Great Britain

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ppm</th>
<th>mg/m³</th>
<th>Type</th>
<th>Category</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TALC, RESPIRABLE DUST 14807-96-6</td>
<td>1</td>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>EH40 WEL</td>
<td></td>
</tr>
</tbody>
</table>

---

Martin GmbH
Industriestrasse 17
D- 82110 Germering / Germany
Geschäftsführer / General Manager
Carlotta Baumann

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Fon +49 (0)89 8941898-0
Fax +49 (0)89 8941898-19
info@martin-smt.de
www.martin-smt.de
Occupational Exposure Limits

Valid for Ireland

<table>
<thead>
<tr>
<th>Ingredient [Regulated substance]</th>
<th>ppm</th>
<th>mg/m³</th>
<th>Value type</th>
<th>Short term exposure limit category / Remarks</th>
<th>Regulatory list</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc (Mg₃H₂(SiO₃)₄) 14807-96-6</td>
<td>0.8</td>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>IR_OEL</td>
<td></td>
</tr>
<tr>
<td>[TALC, RESPIRABLE DUST]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talc (Mg₃H₂(SiO₃)₄) 14807-96-6</td>
<td>10</td>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>IR_OEL</td>
<td></td>
</tr>
<tr>
<td>[TALC, TOTAL INHALABLE DUST]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls: Ensure good ventilation/extraction.

Respiratory protection:
Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A

Hand protection:
Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:
Wear suitable protective clothing.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

- Appearance: paste red
- Odor: Mild
- Odour threshold: No data available / Not applicable
- pH: No data available / Not applicable
- Initial boiling point: No data available / Not applicable
- Flash point: > 93 °C (> 199.4 °F)
Decomposition temperature   No data available / Not applicable
Vapour pressure    No data available / Not applicable
Density    1,35 g/cm³
Bulk density    No data available / Not applicable
Viscosity    No data available / Not applicable
Viscosity (kinematic)    No data available / Not applicable
Explosive properties    No data available / Not applicable
Solubility (qualitative)    No data available / Not applicable
Solidification temperature    No data available / Not applicable
Melting point    No data available / Not applicable
Flammability    No data available / Not applicable
Auto-ignition temperature    No data available / Not applicable
Explosive limits    No data available / Not applicable
Partition coefficient: n-octanol/water    No data available / Not applicable
Evaporation rate    No data available / Not applicable
Vapor density    No data available / Not applicable
Oxidising properties    No data available / Not applicable

9.2.  Other information
No data available / Not applicable

10. Stability and Reactivity

10.1.  Reactivity
Reacts with alcohols and amines.
Reacts with oxidants, acids and lyes
Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.

10.2.  Chemical stability
Stable under recommended storage conditions.

10.3.  Possibility of hazardous reactions
See section reactivity

10.4.  Conditions to avoid
No decomposition if stored and applied as directed.

10.5.  Incompatible materials
See section reactivity

10.6.  Hazardous decomposition products
Hydrocarbons
carbon oxides.
nitrogen oxides
Rapid polymerisation may generate excessive heat and pressure

11. Toxicological Information

11.1.  Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC.
Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**Oral toxicity:** May cause irritation to the digestive tract.

**Inhalative toxicity:** May cause irritation to respiratory system.

**Skin irritation:** Causes skin irritation.

**Eye irritation:** Causes serious eye irritation.

**Sensitizing:** May cause an allergic skin reaction.

**Mutagenicity:** Suspected of causing genetic defects

### Acute oral toxicity:

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Value type</th>
<th>Value</th>
<th>Route of application</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>LD50</td>
<td>&gt; 2.000 mg/kg</td>
<td>oral</td>
<td>rat</td>
<td>OECD Guideline 420 (Acute Oral Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>LD50</td>
<td>2.000 mg/kg</td>
<td>oral</td>
<td>rat</td>
<td>OECD Guideline 401 (Acute Oral Toxicity)</td>
<td></td>
</tr>
<tr>
<td>RP Bisphenol F-epichlorohydrin resin, MW&lt;=700 28064-14-4</td>
<td>LD50</td>
<td>&gt; 5.000 mg/kg</td>
<td>oral</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Acute inhalative toxicity:

### Acute dermal toxicity:

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Value type</th>
<th>Value</th>
<th>Route of application</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>LD50</td>
<td>23.000 mg/kg</td>
<td>dermal</td>
<td>rabbit</td>
<td>OECD Guideline 402 (Acute Dermal Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>LD50</td>
<td>2.000 mg/kg</td>
<td>dermal</td>
<td>rat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Skin corrosion/irritation:

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Result</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>slightly irritating</td>
<td>4 h</td>
<td>rabbit</td>
<td>OECD Guideline 404 (Acute Dermal Irritation /Corrosion)</td>
</tr>
</tbody>
</table>
**Serious eye damage/irritation:**

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product:</td>
<td>not irritating</td>
<td></td>
<td>rabbit</td>
<td>OECD Guideline 405 (Acute Eye Irritation / Corrosion)</td>
</tr>
<tr>
<td>bisphenol-A-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(epichlorhydrin);</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>epoxy resin (number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average molecular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weight &lt;= 700)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25068-38-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RP Bisphenol F-</td>
<td>not irritating</td>
<td></td>
<td>rabbit</td>
<td>OECD Guideline 405 (Acute Eye Irritation / Corrosion)</td>
</tr>
<tr>
<td>epichlorohydrin resin,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MW&lt;=700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28064-14-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Respiratory or skin sensitization:**

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Test type</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product:</td>
<td>sensitising</td>
<td>Mouse</td>
<td>mouse</td>
<td>OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)</td>
</tr>
<tr>
<td>bisphenol-A-</td>
<td></td>
<td>local lymph node assay (LLNA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(epichlorhydrin);</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>epoxy resin (number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average molecular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weight &lt;= 700)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25068-38-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neodecanoic acid,</td>
<td>sensitising</td>
<td>Guinea pig</td>
<td>guinea pig</td>
<td>OECD Guideline 406 (Skin Sensitisation)</td>
</tr>
<tr>
<td>oxiranylmethyl ester</td>
<td></td>
<td>maximisation test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26761-45-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Germ cell mutagenicity:**

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Result</th>
<th>Type of study / Route of administration</th>
<th>Metabolic activation / Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product:</td>
<td>negative</td>
<td>bacterial reverse mutation assay (e.g. Ames test)</td>
<td></td>
<td></td>
<td>OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)</td>
</tr>
<tr>
<td>bisphenol-A-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(epichlorhydrin);</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>epoxy resin (number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average molecular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weight &lt;= 700)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25068-38-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neodecanoic acid,</td>
<td>positive</td>
<td>oral: gavage</td>
<td></td>
<td>mouse</td>
<td></td>
</tr>
<tr>
<td>oxiranylmethyl ester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26761-45-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**12. Environmental Information**

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC.
### 12.1. Toxicity

**Ecotoxicity:**

Do not empty into drains / surface water / ground water.

Toxic to aquatic life with long lasting effects.

#### 13. Disposal Considerations

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Value type</th>
<th>Value</th>
<th>Acute Toxicity Study</th>
<th>Exposure time</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>LC50</td>
<td>1,750000 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Oncorhynchus mykiss</td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>1,75 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (reported as Salmo gairdneri)</td>
<td>OECD Guideline 203 (Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>NOEC</td>
<td>2.4 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus capricornutum</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>9.4 mg/l</td>
<td>Algae</td>
<td>72 h</td>
<td>Scenedesmus capricornutum</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) 25068-38-6</td>
<td>NOEC</td>
<td>0.3 mg/l</td>
<td>chronic Daphnia magna</td>
<td>21 d</td>
<td>Daphnia magna</td>
<td>OECD 211 (Daphnia magna, Reproduction Test)</td>
</tr>
<tr>
<td>Epoxy resin 68413-24-1</td>
<td>LC50</td>
<td>&gt; 10.000 mg/l</td>
<td>Fish</td>
<td>48 h</td>
<td>Leuciscus idus</td>
<td>DIN 38412-15</td>
</tr>
<tr>
<td>Epoxy resin 68413-24-1</td>
<td>EC50</td>
<td>&gt; 100 mg/l</td>
<td>Daphnia magna</td>
<td>24 h</td>
<td>Daphnia magna</td>
<td>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Epoxy resin 68413-24-1</td>
<td>EC 50</td>
<td>&gt; 100 mg/l</td>
<td>Bacteria</td>
<td>3 h</td>
<td></td>
<td>OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)</td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>LC50</td>
<td>9.61 mg/l</td>
<td>Fish</td>
<td>96 h</td>
<td>Oncorhynchus mykiss</td>
<td>EPA OTS 797.1400 (Fish Acute Toxicity Test)</td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>EC50</td>
<td>4.8 mg/l</td>
<td>Daphnia magna</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>NOEC</td>
<td>1 mg/l</td>
<td>Algae</td>
<td>96 h</td>
<td>Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)</td>
<td>OECD Guideline 201 (Alga, Growth Inhibition Test)</td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester 26761-45-5</td>
<td>EC 50</td>
<td>&gt; 100 mg/l</td>
<td>Bacteria</td>
<td></td>
<td></td>
<td>OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

**Persistence and Biodegradability:**

The product is not biodegradable.

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>Result</th>
<th>Route of application</th>
<th>Degradability</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin 68413-24-1</td>
<td>readily biodegradable</td>
<td>aerobic</td>
<td>79 %</td>
<td>OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)</td>
</tr>
<tr>
<td>Neodecanioic acid, oxiranylmethyl ester 26761-45-5</td>
<td>under test conditions no biodegradation observed</td>
<td>aerobic</td>
<td>7 - 8 %</td>
<td>OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)</td>
</tr>
<tr>
<td>RP Bisphenol F-epichlorohydrin resin, MW&lt;=700 28064-14-4</td>
<td>aerobic</td>
<td></td>
<td>10 - 16 %</td>
<td>OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential / 12.4. Mobility in soil

**Mobility:**

Cured adhesives are immobile.

**Bioaccumulative potential:**

No data available.

<table>
<thead>
<tr>
<th>Hazardous components CAS-No.</th>
<th>LogKow</th>
<th>Bioconcentration factor (BCF)</th>
<th>Exposure time</th>
<th>Species</th>
<th>Temperatur</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neodecanioic acid, oxiranylmethyl ester 26761-45-5</td>
<td>4,4</td>
<td>4,4</td>
<td></td>
<td></td>
<td>20 °C</td>
<td>OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC)</td>
</tr>
</tbody>
</table>
### 12.5. Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>PBT/vPvB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.</td>
</tr>
<tr>
<td>Neodecanoic acid, oxiranylmethyl ester, 26761-45-5</td>
<td>Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.</td>
</tr>
<tr>
<td>RP Bisphenol F-epichlorohydrin resin, MW&lt;=700, 28064-14-4</td>
<td>Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.</td>
</tr>
</tbody>
</table>

### 12.6. Other adverse effects

No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Product disposal:**

Do not empty into drains / surface water / ground water. Dispose of in accordance with local and national regulations.

**Disposal of uncleaned packages:**

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

**Waste code**

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

### 14. Transport Information

#### 14.1. UN number

<table>
<thead>
<tr>
<th>ADR</th>
<th>RID</th>
<th>ADNR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3082</td>
<td>3082</td>
<td>3082</td>
<td>3082</td>
<td>3082</td>
</tr>
</tbody>
</table>

#### 14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>ADR</th>
<th>RID</th>
<th>ADNR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin)</td>
</tr>
</tbody>
</table>
14.3. Transport hazard class(es)

ADR   9
RID   9
ADNR  9
IMDG  9
IATA  9

14.4. Packaging group

ADR   III
RID   III
ADNR  III
IMDG  III
IATA  III

14.5. Environmental hazards

ADR   not applicable
RID   not applicable
ADNR  not applicable
IMDG  Marine pollutant
IATA   not applicable

14.6. Special precautions for user

ADR   not applicable
RID   Tunnelcode: (E)
ADNR  not applicable
IMDG  not applicable
IATA   not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory Information

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

VOC content   <3%
(1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.
16. Other Information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H341 Suspected of causing genetic defects.
H411 Toxic to aquatic life with long lasting effects.

Further information:
This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties., even in extracts.

Label elements (DPD):

Xn - Harmful
N - Dangerous for the environment

Risk phrases:
R68 Possible risk of irreversible effects.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S24 Avoid contact with skin.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 Wear suitable gloves.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:
Contains epoxy constituents. See information supplied by the manufacturer.

Contains:
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700),
Neodecanoic acid, oxiranylmethyl ester,
RP Bisphenol F-epichlorohydrin resin, MW<=700,
Epoxy resin