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

- **Product identifier**
- **Trade name:** Amosil 4R
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Special Glue Part B
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** SOLARONIX SA
  - Rue de l'Ouriette 129, CH-1170 Aubonne, Switzerland
  - info@solaronix.com
  - T +41 21 821 22 80
  - www.solaronix.com
  - F +41 21 821 22 89
  - info@solaronix.com
- **Emergency telephone number:** Swiss Toxicological Information Center: +41 44 251 51 51

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  
  - GHS09 environment
  
  - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

  - GHS07
    
    - Skin Irrit. 2 H315 Causes skin irritation.
    - Eye Irrit. 2 H319 Causes serious eye irritation.
    - Skin Sens. 1 H317 May cause an allergic skin reaction.

  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    
    - Xi; Irritant
      
      - R36/38: Irritating to eyes and skin.
    - Xi; Sensitising
      
      - R43: May cause sensitisation by skin contact.
    - N; Dangerous for the environment
      
      - R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

  - **Information concerning particular hazards for human and environment:**
    The product has to be labelled in the latest valid version according to the calculation procedure of the "General Classification guideline for preparations of the EU".

  - **Classification system:**
    The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Safety data sheet according to 1907/2006/EC, Article 31

Trade name: Amosil 4R

Hazard pictograms

GHS07  GHS09

Signal word Warning

Hazard-determining components of labelling:
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Mixture: consisting of the following components.

Dangerous components:

| CAS: 25068-38-6 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) |
| NLP: 500-033-5 | 50-100% |
| Xi R36/38; Xi R43; N R51/53 |
| Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 |

Additional information: For the wording of the listed risk phrases, refer to section 16.

4 First aid measures

Description of first aid measures

After excessive inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient in a stable laying down side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.
5 Firefighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture**
  No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protective equipment.
  See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
  - **Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see section 7.
Trade name: Amosil 4R

• Control parameters
• Ingredients with limit values that require monitoring at the workplace: The product does not contain any significant quantities of materials with critical values that have to be monitored at the workplace.
• Additional information: As a basis for the production of this document, the most current valid lists were used.

• Exposure controls
• Personal protective equipment:
• General protective and hygienic measures: Keep away from food, beverages and pet food. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
• Respiratory protection: Not required.
• Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

• Gloves material:
The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before use.
• Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

• Information on basic physical and chemical properties
• General Information
• Appearance:
  Form: Pasty
  Colour: White
• Odour: Aromatic
• Odour threshold: Not determined.
• pH-value at 20°C: 6

• Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: > 200°C
• Flash point: 154°C
10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
  - On the skin: Irritant to skin and mucous membranes.
  - On the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
  The product shows the following hazards according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
12 Ecological information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: No further relevant information available.
  - **Behaviour in environmental systems**:
    - **Bioaccumulative potential**: No further relevant information available.
    - **Mobility in soil**: No further relevant information available.
  - **Ecotoxicological effects**:
    - **Remark**: Toxic for fish
  - **Additional ecological information**:
  - **General notes**:
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    
    ![Warning symbol]
    Do not allow product to reach ground water, water course or sewage system.
    
    Danger to drinking water if even small quantities leak into the ground.
    Also poisonous for fish and plankton in water bodies.
    Toxic for aquatic organisms
  - **Results of PBT and vPvB assessment**
    - **PBT**: Not applicable.
    - **vPvB**: Not applicable.
  - **Other adverse effects**: No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
  
  ![Warning symbol]
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging**:
- **Recommendation**: Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**:

  ![Symbol]

- **ADR/RID class**: 9 (M6) Miscellaneous dangerous substances and articles.
- **Danger code (Kemler)**: 90
Trade name: **Amosil 4R**

<table>
<thead>
<tr>
<th><strong>UN-Number:</strong></th>
<th>3082</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Packaging group:</strong></td>
<td>III</td>
</tr>
<tr>
<td><strong>Hazard label:</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Special marking:</strong></td>
<td>Symbol (fish and tree)</td>
</tr>
<tr>
<td><strong>UN proper shipping name:</strong></td>
<td>3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))</td>
</tr>
<tr>
<td><strong>Limited quantities (LQ):</strong></td>
<td>5L</td>
</tr>
<tr>
<td><strong>Transport category:</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Tunnel restriction code:</strong></td>
<td>E</td>
</tr>
</tbody>
</table>

### Maritime transport IMDG:

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<tbody>
<tr>
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<td><strong>Label:</strong></td>
<td>9</td>
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<tr>
<td><strong>Packaging group:</strong></td>
<td>III</td>
</tr>
<tr>
<td><strong>EMS Number:</strong></td>
<td>F-A,S-F</td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Proper shipping name:</strong></td>
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</table>

### Air transport ICAO-TI and IATA-DGR:

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</tr>
</tbody>
</table>

### Environmental hazards:

- **Product contains environmentally hazardous substances:** reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
- **Special precautions for user** Warning: Miscellaneous dangerous substances and articles.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
15 Regulatory information

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H315 Causes skin irritation.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  H411 Toxic to aquatic life with long lasting 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.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
  ICAO: International Civil Aviation Organization
  ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals