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

1.1. Product identifier
Epoxy resin "water-clear"

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Epoxy resin products, solvent-free, sensitising

1.3. Details of the supplier of the safety data sheet
Company name: Suter Kunststoffe AG
Aefligenstrasse 3
CH-3312 Fraubrunnen
info@swiss-composite.ch
Tel: +41 (0)31 763 60 60
Fax: +41 (0)31 763 60 61

1.4. Emergency telephone number:
Tox Info Suisse - Emergency number: 145
(from abroad: +41 44 251 51 51)
non urgent inquiry: +41 44 251 66 66

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008
Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

2.2. Label elements
Regulation (EC) No. 1272/2008
Hazard components for labelling
epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)
Phenol, polymer with formaldehyde, glycidyl ether
Hexandioldiglycidylether
Signal word: Warning
Pictograms:

Hazard statements
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.

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P280 Wear protective gloves and eye/face protection.

P273 Avoid release to the environment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Special labelling of certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>EC No Index No</th>
<th>REACH No</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A- (epichlorhydrin)</td>
<td>500-033-5</td>
<td>603-074-00-8</td>
<td>50-100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Phenol, polymer with formaldehyde, glycidyl ether</td>
<td></td>
<td></td>
<td>10 - 25 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>240-260-4</td>
<td>01-2119463471-41</td>
<td>10 - 25 %</td>
</tr>
</tbody>
</table>

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately.

After inhalation

consult a doctor.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Seek medical advice immediately.

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

The product does not contain any relevant quantities of substances with workplace-related limit values to be monitored.
4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
- Carbon dioxide (CO2), Extinguishing powder, Water spray jet.

Unsuitable extinguishing media
- High power water jet.

5.2. Special hazards arising from the substance or mixture

When heating up or in the fire case formation of poisonous gasses possible.

5.3. Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.
- Additional information
  - Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
  - Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Use personal protection equipment.

6.2. Environmental precautions

- Do not allow to enter into surface water or drains.
- Do not allow to enter the soil or subsoil.

6.3. Methods and material for containment and cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

- Carefully cleaning scene of an accident.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Advice on safe handling
  - Provide adequate room ventilation, if necessary with vapour extraction at the workplace.

- Advice on protection against fire and explosion
  - No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

- Requirements for storage rooms and vessels
  - Keep/Store only in original container. Provide for retaining containers, eg. floor pan without outflow.

- Advice on storage compatibility
  - Store separately from foodstuffs.

- Further information on storage conditions
  - Keep receptacles tightly sealed.

7.3. Specific end use(s)

- The product does not contain any relevant quantities of substances with workplace-related limit values to be monitored.
8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection
Suitable eye protection: goggles.

Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Recommended material: FKM (fluoro rubber), @0802.B008198
Thickness of glove material: > 0,5mm

Skin protection
Wear suitable protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Combination filtering device (EN 14387) A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td>not determined</td>
</tr>
<tr>
<td>Colour</td>
<td>light yellow</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
<td></td>
</tr>
<tr>
<td>pH-Value</td>
<td></td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td></td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt;200 °C</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td></td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td></td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td></td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>not applicable</td>
</tr>
</tbody>
</table>
## Decomposition temperature
Not determined

## Oxidizing properties
Not oxidising.

### Vapour pressure
1 hPa

### Density (at 23 °C)
1,14 g/cm³ ISO 2811

### Water solubility
The study does not need to be conducted because the substance is known to be insoluble in water.

## Solubility in other solvents
Not determined

### Partition coefficient
Not determined

### Viscosity / dynamic
825 mPa·s ISO 3219

### Vapour density
Not determined

### Evaporation rate
Not determined

### Solid content
Not determined

## SECTION 10: Stability and reactivity

### Reactivity
No hazardous reaction when handled and stored according to provisions.

### Chemical stability
The product is stable under storage at normal ambient temperatures.

### Possibility of hazardous reactions
Response: Oxidising agent, strong, Alkalis (alkalis), Acids.

### Conditions to avoid
Oxidizing agents, strong.

### Incompatible materials
The product does not contain any relevant quantities of substances with workplace-related limit values to be monitored.

### Hazardous decomposition products
In case of fire may be liberated: toxic and caustic gases and vapours

## SECTION 11: Toxicological information

### Information on toxicological effects
Acute toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>oral</td>
<td>LD50</td>
<td>Rat</td>
<td>GESTIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 22800</td>
<td>Rabbit</td>
<td>GESTIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Phenol, polymer with formaldehyde, glycidyl ether</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 2000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>oral</td>
<td>LD50</td>
<td>3010</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000</td>
<td>Rat</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information**

**12.1. Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>4,4 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>EPA-660/3-75-009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>9,4 mg/l</td>
<td>72 h</td>
<td>Scenedesmus capricornutum</td>
<td>EPA-660/3-75-009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>2,8 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD 202</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute bacteria toxicity</td>
<td>(&gt; 100 mg/l)</td>
<td>3 h</td>
<td>Activated sludge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>30 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>OECD 203</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>39 - 57 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD 202</td>
<td></td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

The product has not been tested.
12.3. Bioaccumulative potential

The product has not been tested.

**Partition coefficient n-octanol/water**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>3.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>BCF</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>31</td>
<td>Species</td>
<td>Quantitative structure-activity relationship (QSAR)</td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-Bis(2,3-epoxypropoxy)hexane</td>
<td>3.57</td>
<td>Species</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

<table>
<thead>
<tr>
<th>Waste disposal number of waste from residues/unused products</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>080299</td>
<td>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified</td>
</tr>
</tbody>
</table>

Waste disposal number of used product

<table>
<thead>
<tr>
<th>Waste disposal number of used product</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>080299</td>
<td>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified</td>
</tr>
</tbody>
</table>
### Waste disposal number of contaminated packaging

080299  WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### Land transport (ADR/RID)

14.1. UN number: UN 3082  
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxydharz)  
14.3. Transport hazard class(es): 9  
14.4. Packing group: III  
Hazard label: 9

<table>
<thead>
<tr>
<th>Classification code:</th>
<th>M6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Provisions:</td>
<td>274 335 601</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>5 L</td>
</tr>
<tr>
<td>Transport category:</td>
<td>3</td>
</tr>
<tr>
<td>Hazard No:</td>
<td>90</td>
</tr>
<tr>
<td>Tunnel restriction code:</td>
<td>E</td>
</tr>
</tbody>
</table>

**Other applicable information (land transport)**  
E1

### Inland waterways transport (ADN)

14.1. UN number: UN 3082  
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxydharz)  
14.3. Transport hazard class(es): 9  
14.4. Packing group: III  
Hazard label: 9

<table>
<thead>
<tr>
<th>Classification code:</th>
<th>M6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Provisions:</td>
<td>274 335 601</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>5 L</td>
</tr>
</tbody>
</table>

**Other applicable information (inland waterways transport)**  
E1

### Marine transport (IMDG)

14.1. UN number: UN 3082  
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)  
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9

Marine pollutant: Ja
Special Provisions: 274, 335
Limited quantity: 5 L
EmS: F-A, S-F

Other applicable information (marine transport)
E1

Air transport (ICAO-TI/IATA-DGR)
14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9

Special Provisions: A97 A158
Limited quantity Passenger: 30 kg G
IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

Other applicable information (air transport)
E1
Passenger-LQ: Y964

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of Marpol 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 regulatory information
2004/42/EC (VOC): 90 % (918 g/l)

National regulatory information
Employment restrictions: Observe restrictions to employment for juvenils according to the ‘juvenile work protection guideline’ (94/33/EC).

Water contaminating class (D): 2 - clearly water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)
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.
H412 Harmful to aquatic life with long lasting effects.
EUH205 Contains epoxy constituents. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)