according to Regulation (EC) No 1907/2006

| Ероху | Resin L |
|-------|----------------|
|-------|----------------|

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

1.1. Product identifier

Epoxy Resin L

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

Use of the substance/mixture

Epoxy resin products, low in solvents, sensitising

1.3. Details of the supplier of the safety data sheet

| Company name: | Suter Kunststoffe AG |
|-------------------|--|
| Street: Place: | Aefligenstrasse 3 CH-3312 Fraubrunnen |
| - | |

| Telephone: | +41 (0)31 763 60 60 | Telefax:+41 (0)31 763 60 61 |
|--------------------------|---|-----------------------------|
| e-mail: | info@swiss-composite.ch | |
| Internet: | www.swiss-composite.ch | |
| Responsible Department: | Sales Team | |
| 1.4. Emergency telephone | Tox Info Suisse | |
| <u>number:</u> | Emergency number: 145 (from abroad: +41 | 1 44 251 51 51) |

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 eve 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) **Bisphenol-F-Epoxy resin** 1,6-Bis(2,3-epoxypropoxy)hexane

Warning

Signal word:

Pictograms:



Hazard statements

| H315 | Causes skin irritation. |
|------|--------------------------------------|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |

according to Regulation (EC) No 1907/2006

| Epoxy Resin L | | | | | |
|---------------------------|---|--------------|--|--|--|
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| H411 | Toxic to aquatic life with long lasting effects. | | | | |
| Precautionary statemer | nts | | | | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | | | | |
| P273 | Avoid release to the environment. | | | | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | | | | |
| Special labelling of cert | ain mixtures | | | | |
| EUH205 | Contains epoxy constituents. May produce an allergic reaction. | | | | |
| 2.3. Other hazards | | | | | |
| No information availa | able. | | | | |

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | | |
|------------|--|------------------------------|------------------|--|--|
| | EC No | Index No | REACH No | | |
| | Classification according to Regulat | ion (EC) No. 1272/2008 [CLP] | • | | |
| 25068-38-6 | epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A- (epichlorhydrin) | | | | |
| | 500-033-5 | 603-074-00-8 | | | |
| | Eye Irrit. 2, Skin Irrit. 2, Skin Sens. | 17 H411 | | | |
| 16096-31-4 | 1,6-Bis(2,3-epoxypropoxy)hexane | | 10 -25 % | | |
| | 240-260-4 | | 01-2119463471-41 | | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. | 17 H412 | | | |
| 28064-14-4 | Phenol, polymer with formaldehyde | | 10 - 25 % | | |
| | | | | | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. | 17 H411 | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

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

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Seek medical advice immediately.

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

No information available.

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

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Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Extinguishing powder, Water spray jet.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn. In case of fire may be liberated: Gases/vapours, toxic.

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

The usual precautions when handling chemicals must be observed.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

according to Regulation (EC) No 1907/2006

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8.2. Exposure controls





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.

Suitable material: FKM (fluoro rubber), NBR (Nitrile rubber) Thickness of the glove material: > 0,5mm

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. ABEK-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| 1. Information on basic physical and che | mical properties | | |
|--|------------------|----------------|-------------|
| Physical state: | Liquid | | |
| Colour: | yellowish | | |
| Odour: | characteristic | | |
| | | | Test method |
| pH-Value: | | not determined | |
| Changes in the physical state | | | |
| Melting point: | | not determined | |
| Initial boiling point and boiling range: | | 200 °C | |
| Flash point: | | 150 °C | |
| Flammability | | | |
| Solid: | | not applicable | |
| Gas: | | not applicable | |
| Lower explosion limits: | | not determined | |
| Upper explosion limits: | | not determined | |
| Auto-ignition temperature | | | |
| Solid: | | not applicable | |
| Gas: | | not applicable | |
| Decomposition temperature: | | not determined | |
| Oxidizing properties | | | |
| Not oxidising. | | | |

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|--|--|------------|--|--|--|--|
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| Vapour pressure: (at 20 °C) | 1 hPa | | | | | |
| Density (at 23 °C): | 1,1 g/cm³ | ISO 2811-2 | | | | |
| 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: (at 23 °C) | 875 mPa∙s | ISO 3219 | | | | |
| Vapour density: | not determined | | | | | |
| Evaporation rate: | not determined | | | | | |
| 9.2. Other information | | | | | | |
| Solid content: | not determined | | | | | |

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

no decomposition when stored and handled properly

10.3. Possibility of hazardous reactions

reaction with strong oxidising agents Alkalis (alkalis). Acids

10.4. Conditions to avoid

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

10.5. Incompatible materials

Keep away from oxidising agents.

10.6. Hazardous decomposition products

no decomposition when stored and handled properly In case of fire may be liberated: toxic and caustic gases and vapours

SECTION 11: Toxicological information

11.1. Information on toxicological effects

according to Regulation (EC) No 1907/2006

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Acute toxicity

| CAS No | Chemical name | hemical name | | | | | | |
|------------|---------------------------------|---|--------------|----------------------------|---------------------------|--------|--|--|
| | Exposure route | Dose | | Species | Source | Method | | |
| 25068-38-6 | epoxy resin (number aver | age molecul | ar weight <= | 700), reaction product: bi | sphenol-A-(epichlorhydrin |) | | |
| | oral | LD50 mg/kg | 11400 | Rat | GESTIS | | | |
| | dermal | LD50 mg/kg | > 22800 | Rabbit | GESTIS | | | |
| 16096-31-4 | 1,6-Bis(2,3-epoxypropoxy)hexane | | | | | | | |
| | oral | LD50 mg/kg | 3010 | Rat | OECD 401 | | | |
| | dermal | LD50 mg/kg | > 2000 | Rat | OECD 402 | | | |
| 28064-14-4 | Phenol, polymer with forn | Phenol, polymer with formaldehyde, glycidyl ether | | | | | | |
| | oral | LD50 mg/kg | > 2000 | Rat | | | | |
| | dermal | LD50 mg/kg | > 2000 | Rat | | | | |

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

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

12.2. Persistence and degradability

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

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| CAS No | Chemical name | | | | | | |
|------------|--|-------|----|--------------|--|--|--|
| | Method | Value | d | Source | | | |
| | Evaluation | • | | • | | | |
| 25068-38-6 | epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin) | | | | | | |
| | OECD 301F | 5% | 28 | Manufacturer | | | |
| | Not readily biodegradable (according to OECD criteria) | | | | | | |
| | OECD 301B | 6-12% | 28 | Manufacturer | | | |
| | Not readily biodegradable (according to OECD criteria) | | | | | | |
| 16096-31-4 | 1,6-Bis(2,3-epoxypropoxy)hexane | | | | | | |
| | OECD 301D | 47% | 28 | Manufacturer | | | |
| | Readily biodegradable (according to OECD criteria). | | | | | | |

12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|------------|--|---------|
| 25068-38-6 | epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A- (epichlorhydrin) | 3,24 |

BCF

| CAS No | Chemical name | BCF | Species | Source |
|------------|--|------|---------|---|
| 25068-38-6 | epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin) | 31 | | Quantitative structure-activity relationship (QSAR) |
| 16096-31-4 | 1,6-Bis(2,3-epoxypropoxy)hexane | 3,57 | | |

12.4. Mobility in soil

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

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

080299

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

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

Waste disposal number of used product

| according to Regulation | (FC) No | 1907/2006 |
|-------------------------|---------|-----------|
| according to regulation | | 1001/2000 |

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|-----------------------------------|--|--|--------------|--|
| 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 | | | |
| | minated packages may b | e recycled. Handle contaminated packages in the same way as the according to applicable legislation. | | |
| SECTION 14: T | ransport information | | | |
| Land transport (| ADR/RID) | | | |
| <u>14.1. UN num</u> | ber: | UN 3082 | | |
| 14.2. UN prop | er shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxydharz) | | |
| <u>14.3. Transpo</u> | rt hazard class(es): | 9 | | |
| 14.4. Packing | group: | III | | |
| Hazard label: | | 9 | | |
| | | | | |
| Classification Special Provis | sions: | M6 274 335 601 | | |
| Limited quanti | | 5 L 3 | | |
| Transport category: Hazard No: | | 90 | | |
| Tunnel restrict | tion code: | E | | |
| Other applica E1 | ble information (land tra | nsport) | | |
| Inland waterway | s transport (ADN) | | | |
| 14.1. UN num | | UN 3082 | | |
| | per shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxydharz) | | |
| <u>14.3. Transpo</u> | rt hazard class(es): | 9 | | |
| 14.4. Packing | group: | III | | |
| Hazard label: | | 9 | | |
| | | | | |
| Classification | | M6 | | |
| Special Provis Limited quanti | | 274 335 601 5 L | | |
| Other applica E1 | ble information (inland v | vaterways transport) | | |
| Marine transport | t (IMDG) | | | |
| <u>14.1. UN num</u> | | UN 3082 | | |
| | er shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin) | | |
| 14.3. Transport hazard class(es): | | 9 | | |
| 14.4. Packing group: | | III | | |
| | | | | |

according to Regulation (EC) No 1907/2006

| | Epoxy Resin L | | |
|---|---|--------------|--|
| Revision date: 19.03.2018 | Product code: 100135 | Page 9 of 10 | |
| Hazard label: | 9 | | |
| | A | | |
| | | | |
| | e | | |
| Marine pollutant: | Ja | | |
| Special Provisions: | 274, 335 | | |
| Limited quantity: EmS: | 5 L F-A, S-F | | |
| Other applicable information (marine t | | | |
| E1 | | | |
| Air transport (ICAO-TI/IATA-DGR) | | | |
| <u>14.1. UN number:</u> | 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 | | |
| | | | |
| | 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: IATA-max. quantity - Cargo: | 964 450 L | | |
| Other applicable information (air trans | | | |
| E1 | | | |
| Passenger-LQ: Y964 | | | |
| 14.5. Environmental hazards | | | |
| ENVIRONMENTALLY HAZARDOUS: | yes | | |
| Danger releasing substance: | epoxy resin (number average molecular weight <= 700), reaction proc bisphenol-A-(epichlorhydrin) | duct: | |
| 14.6. Special precautions for user | | | |
| No information available. | | | |
| 14.7. Transport in bulk according to Anne not applicable | ex II of Marpol and the IBC Code | | |
| SECTION 15: Regulatory information | | | |
| 15.1. Safety, health and environmental reg | gulations/legislation specific for the substance or mixture | | |
| National regulatory information | | | |
| Employment restrictions: | Observe restrictions to employment for juvenils according to the 'juve | nile | |
| Water contaminating class (D): | work protection guideline' (94/33/EC). 2 - clearly water contaminating | | |
| | | | |

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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

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

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.)