

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Epoxy Resin L**

Print date: 25.08.2016

Product code: 100135

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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:	R&G Faserverbundwerkstoffe GmbH	
	Composite Technology	
Street:	Im Meißel 7 - 13	
Place:	D-71111 Waldenbuch	
Post-office box:	1145	
	D-71107 Waldenbuch	
Telephone:	+49 (0)7157 5304-60	Telefax: +49 (0)7157 5304-70
e-mail:	info@r-g.de	
Internet:	www.r-g.de	
Responsible Department:	Management	

**1.4. Emergency telephone number:** Vergiftungs-Informations-Zentrale Freiburg  
Tel: +49 (0)761 19240

**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.

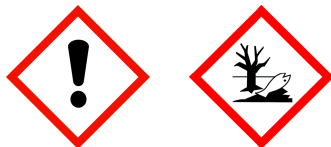
Toxic to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)

Bisphenol-F-Epoxy resin

1,6-Bis(2,3-epoxypropoxy)hexane

**Signal word:** Warning**Pictograms:****Hazard statements**

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

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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.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			50 - 100 %
	500-033-5	603-074-00-8		
	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H315 H317 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. 1, Aquatic Chronic 3; H315 H319 H317 H412			
55492-52-9	Bisphenol-F-Epoxy resin			10 - 25 %
	611-275-7			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 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.

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### 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 (CO<sub>2</sub>), 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)

No further relevant information

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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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**

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

Ignition temperature: 300 °C

**Auto-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidizing.

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Vapour pressure: 1 hPa  
(at 20 °C)

Density (at 23 °C): 1,1 g/cm<sup>3</sup> ISO 2811-2

Water solubility: insoluble

### Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: 875 mPa·s ISO 3219  
(at 23 °C)

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

No further relevant information

### 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

#### Acute toxicity

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			
	oral	LD50 11400 mg/kg	Rat	GESTIS
	dermal	LD50 > 22800 mg/kg	Rabbit	GESTIS
16096-31-4	1,6-Bis(2,3-epoxypropoxy)hexane			
	oral	LD50 3010 mg/kg	Rat	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	OECD 402
55492-52-9	Bisphenol-F-Epoxy resin			
	oral	LD50 > 5000 mg/kg	Rat	

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### Additional information on tests

This 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
25068-38-6	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/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 39 - 57 mg/l	48 h	Daphnia magna	OECD 202

### 12.2. Persistence and degradability

No further relevant information

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

No further relevant information

### 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

No further relevant information

### 12.5. Results of PBT and vPvB assessment

not applicable

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**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**

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

**Waste disposal number of used product**

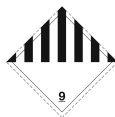
080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Dispose of waste according to applicable legislation.

**SECTION 14: Transport information****Land transport (ADR/RID)**

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



Classification code:	M6
Special Provisions:	274 335 601
Limited quantity:	5 L
Transport category:	3
Hazard No:	90
Tunnel restriction code:	E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	UN 3082
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxydharz)
<b>14.3. Transport hazard class(es):</b>	9

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### 14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 601

Limited quantity:

5 L

### 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)

#### 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



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ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: epoxy resin (number average molecular weight  $\leq 700$ ), 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****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 - water contaminating

**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.)*