

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

#### 1.1. Product identifier

Trade name : Perma Evolution Component E1  
Type of product : Medical device

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Use of the substance/mixture : Manufacture of medical and dental instruments and supplies  
Root filling material based on epoxy resin for permanent root fillings.

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Alfred Becht GmbH  
Carl-Zeiss-Str. 16  
P.O. Box 1145  
77656 Offenburg  
T +49 781 60586-0 - F +49 781 60586-40

##### Email competent person

sds@kft.de

#### 1.4. Emergency telephone number

Emergency number : National Poison Information Service (NPIS)  
24 hour national number professionals only  
0844 892 0111  
  
National Health Service (NHS)  
24 hour national number consumer  
England and Scotland: 111  
Wales: 0845 46 47  
Northern Ireland: call your local General Practitioner  
  
Call 999 if there is a life-threatening incident.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Skin sensitisation, Category 1 H317  
Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411  
Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS09

Signal word (CLP)

: Warning

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according to Regulation (EC) No. 1907/2006 (REACH)

Hazardous ingredients	: 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Hazard statements (CLP)	: 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 (CLP)	: P261 - Avoid breathing mist, vapours, spray. P273 - Avoid release to the environment. P280 - Wear protective gloves, eye protection, face protection. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P391 - Collect spillage.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Barium sulfate substance with national workplace exposure limit(s) (GB)	(CAS-No.) 7727-43-7 (EC-No.) 231-784-4	>=50 - <70	Not classified
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5 (EC Index-No.) 603-073-00-2	>=25 - <50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	(CAS-No.) 68609-97-2 (EC-No.) 271-846-8 (EC Index-No.) 603-103-00-4	>=1 - <2.5	Skin Irrit. 2, H315 Skin Sens. 1, H317

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	(CAS-No.) 1675-54-3 (EC-No.) 216-823-5 (EC Index-No.) 603-073-00-2	( 5 =<C < 100) Eye Irrit. 2, H319 ( 5 =<C < 100) Skin Irrit. 2, H315

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: May cause an allergic skin reaction. Irritation.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

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according to Regulation (EC) No. 1907/2006 (REACH)

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Strong water jet.

#### 5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Sulphur oxides.

#### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapours, spray.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Notify authorities if product enters sewers or public waters. Avoid sub-soil penetration. Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
- Other information : Disposal must be done according to official regulations.

#### 6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing mist, vapours, spray.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.
- Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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according to Regulation (EC) No. 1907/2006 (REACH)

<b>Barium sulfate (7727-43-7)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Barium sulphate
WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> inhalable dust 4 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Third edition, 2018). HSE
<b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	0.75 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.93 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	89.3 µg/kg
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.006 mg/l
PNEC aqua (marine water)	0.001 mg/l
PNEC aqua (intermittent, freshwater)	0.018 mg/l
PNEC aqua (intermittent, marine water)	0.002
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0.341 mg/kg dwt
PNEC sediment (marine water)	0.034 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.065 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	11 mg/kg food
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	10 mg/l
<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.6 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.106 mg/l
PNEC aqua (marine water)	0.011 mg/l
PNEC aqua (intermittent, freshwater)	0.072 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	307.16 mg/kg dwt
PNEC sediment (marine water)	30.72 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	1.234 mg/kg dwt

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oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)

### PNEC (STP)

PNEC sewage treatment plant

10 mg/l

## 8.2. Exposure controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Hand protection:

In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves. EN 374. Nitrile rubber. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

### Eye protection:

Wear closed safety glasses. EN 166

### Skin and body protection:

Wear suitable protective clothing. EN 340. EN 13034

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 143. Short term exposure. Breathing apparatus with filter. P2. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

### Environmental exposure controls:

Avoid release to the environment.

### Other information:

The above mentioned instructions regarding the protective equipment refer to the industrial use of larger quantities. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Paste.
Colour	: white.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.17 - 2.09 g/cm <sup>3</sup>
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: No data available

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

<b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b>	
LC50 fish 1	2 mg/l (96 h; Oncorhynchus mykiss; (OECD 203 method))
EC50 Daphnia 1	1.8 mg/l (48 h; Daphnia magna; (OECD 202 method))
ErC50 (algae)	9.4 mg/l (72 h; Scenedesmus capricornutum; EPA-660/3-75-009)
NOEC chronic crustacea	0.3 mg/l (21 d; Daphnia magna; (OECD 211 method))
NOEC chronic algae	2.4 mg/l (72 h; Scenedesmus capricornutum; EPA-660/3-75-009)

### 12.2. Persistence and degradability

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<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	87 % (28 d; (OECD 301F method))

<b>Barium sulfate (7727-43-7)</b>	
Persistence and degradability	Not applicable.

### 12.3. Bioaccumulative potential

<b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b>	
BCF other aquatic organisms 1	31 l/kg Quantitative structure-activity relationship (QSAR)
Bioaccumulative potential	not bioaccumulable.

<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)</b>	
Log Pow	3.77 (20 °C; (OECD 107 method))

### 12.4. Mobility in soil

<b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b>	
Ecology - soil	Product adsorbs little onto the soil.

### 12.5. Results of PBT and vPvB assessment

<b>Component</b>	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Barium sulfate (7727-43-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Disposal must be done according to official regulations. European waste catalogue. Do not discharge into drains or the environment. Do not dispose of with domestic waste.
Product/Packaging disposal recommendations	: Recycle or dispose of in compliance with current legislation.
HP Code	: HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

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### 14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)	Environmentally hazardous substance, liquid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)
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### Transport document description

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), 9, III
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### 14.3. Transport hazard class(es)

9	9	9	9	9

### 14.4. Packing group

III	III	III	III	III
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### 14.5. Environmental hazards

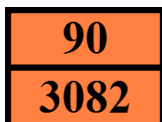
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
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No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Transport category (ADR)	: 3
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: -
EAC code	: •3Z

#### Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F

#### Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964



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PCA max net quantity (IATA) : 450L  
CAO max net quantity (IATA) : 450L  
Special provisions (IATA) : A97, A158, A197

### Inland waterway transport

Classification code (ADN) : M6  
Special provisions (ADN) : 274, 335, 375, 601  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T

### Rail transport

Classification code (RID) : M6  
Special provisions (RID) : 274, 335, 375, 601  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Transport category (RID) : 3  
Hazard identification number (RID) : 90

### 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

#### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on
3(b)	Perma Evolution Component E1 ; 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane ; oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
3(c)	Perma Evolution Component E1 ; 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : Take note of Directive 94/33/EC on the protection of young people at work.

Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

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BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Data sources : Information provided by the manufacturer. MSDSs of the suppliers.

Department issuing data : KFT Chemieservice GmbH  
specification sheet: Im Leuschnerpark. 3 64347 Griesheim  
Germany

Phone: +49 6155-8981-400 Fax: +49 6155 8981-500  
Safety Data Sheet Service: +49 6155 8981-522

Contact person : Katharina Rieker

### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
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.	

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

KFT SDS EU 00

# Perma Evolution Component E1

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according to Regulation (EC) No. 1907/2006 (REACH)

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*