

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ARC 858(E) Part A

Revision date: 22.08.2022

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

##### 1.1. Product identifier

ARC 858(E) Part A

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

###### Use of the substance/mixture

ARC Polymer Composite. Repair damage caused by impact, abrasion or erosion and chemical attack.

###### Uses advised against

No information available.

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

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	D-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
e-mail (Contact person):	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

##### 1.4. Emergency telephone number:

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

#### SECTION 2: Hazards identification

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

###### Regulation (EC) No 1272/2008

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

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### Regulation (EC) No 1272/2008

###### Hazard components for labelling

2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran  
Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-  
[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-  
(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane

**Signal word:** Warning

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#### 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

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

#### Special labelling of certain mixtures

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
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#### 2.3. Other hazards

The safety and health hazards are detailed separately for Part A and Part B. The final cured material is considered nonhazardous. Upon machining, refer to the precautions in the safety data sheets for Part A and Part B.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

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#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran			30 - < 35 %
	216-823-5	603-073-00-2	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			15 - < 20 %
	701-263-0		01-2119454392-40	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
13463-67-7	titanium dioxide			1 - < 5 %
	236-675-5	022-006-00-2	01-2119489379-17	
	Carc. 2; H351			

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

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
1675-54-3	216-823-5	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran	30 - < 35 %
	inhalation: LC50 = ca. 24,6 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 19800 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100		
9003-36-5	701-263-0	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	15 - < 20 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
13463-67-7	236-675-5	titanium dioxide	1 - < 5 %
	oral: LD50 = > 2000 mg/kg		

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After inhalation

Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Seek medical advice immediately. Do not wash with: Solvents/Thinner

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#### **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**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect).

Do NOT induce vomiting.

#### **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**

First Aid, decontamination, treatment of symptoms.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

- alcohol resistant foam
- Water spray jet
- Carbon dioxide (CO<sub>2</sub>)
- Dry extinguishing powder

##### **Unsuitable extinguishing media**

Full water jet

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

In case of fire may be liberated:

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NO<sub>x</sub>)

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters Protective clothing. In case of fire: Wear self-contained breathing apparatus.

Co-ordinate fire-fighting measures to the fire surroundings.

#### **Additional information**

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**

##### **General advice**

Remove persons to safety.

Provide adequate ventilation.

Safe handling: see section 7

Personal protection equipment: see section 8

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#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains. Adverse environmental effects

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

##### **For containment**

Take up mechanically, placing in appropriate containers for disposal. Take up dust-free and set down dust-free.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Personal protection equipment: see section 8

##### **Advice on protection against fire and explosion**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **Advice on general occupational hygiene**

Work in well-ventilated zones or use proper respiratory protection. Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.

##### **Further information on handling**

Wash hands before breaks and after work. Used working clothes should not be worn outside the work area.

Street clothing should be stored separately from work clothing.

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

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

##### **Hints on joint storage**

Keep away from food, drink and animal feedingstuffs.

##### **Further information on storage conditions**

Keep away from:

- Frost
- Heat
- Humidity

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

No information available.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

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#### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
409-21-2	Silicon carbide, respirable dust	-	3		TWA (8 h)	
13463-67-7	Titanium dioxide, respirable dust	-	4		TWA (8 h)	

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#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran			
Worker DNEL, long-term		inhalation	local	310 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	55 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	4,93 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,0893 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,5 mg/kg bw/day
409-21-2	Silicon carbide			
Worker DNEL, acute		inhalation	systemic	94 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	23 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	200 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	13 mg/kg bw/day
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			
Worker DNEL, long-term		inhalation	systemic	29,39 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	104,15 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	0,0083 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	62,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,25 mg/kg bw/day
13463-67-7	titanium dioxide			
Worker DNEL, long-term		inhalation	local	1,25 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	700 mg/kg bw/day

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#### PNEC values

CAS No	Substance	
	Environmental compartment	Value
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran	
	Freshwater	0,006 mg/l
	Freshwater (intermittent releases)	0,018 mg/l
	Marine water	0,001 mg/l
	Freshwater sediment	0,341 mg/kg
	Marine sediment	0,034 mg/kg
	Secondary poisoning	11 mg/kg
	Micro-organisms in sewage treatment plants (STP)	10 mg/l
	Soil	0,065 mg/kg
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	
	Freshwater	0,003 mg/l
	Freshwater (intermittent releases)	0,025 mg/l
	Marine water	0 mg/l
	Freshwater sediment	0,294 mg/kg
	Marine sediment	0,029 mg/kg
	Micro-organisms in sewage treatment plants (STP)	10 mg/l
	Soil	0,237 mg/kg

#### 8.2. Exposure controls

##### Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection:

- Eye glasses with side protection
- goggles

##### Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber),

Wearing time with permanent contact: Thickness of the glove material:  $\geq 0,4$  mm, Breakthrough time:  $>480$  min

Wearing time with occasional contact (splashes): Thickness of the glove material:  $\geq 0,1$  mm, Breakthrough time:  $> 30$  min



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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.

Breakthrough times and swelling properties of the material must be taken into consideration.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

Usually no personal respirative protection necessary.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Combination filtering device A-P3

Self-contained respirator (breathing apparatus)

#### Thermal hazards

No data available

#### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

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

Physical state:	Paste
Colour:	light grey
Odour:	characteristic

	Test method
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability	
Solid/liquid:	No data available
Gas:	No data available
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Flash point:	> 249 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Water solubility:	Immiscible
Solubility in other solvents	
No information available.	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	1,6 g/cm <sup>3</sup>
Relative vapour density:	>1 (air = 1)

### 9.2. Other information

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#### Information with regard to physical hazard classes

##### Explosive properties

No information available.

##### Self-ignition temperature

Solid:

No data available

Gas:

No data available

##### Oxidizing properties

No information available.

#### Other safety characteristics

##### Evaporation rate:

<1 (Ether = 1)

##### Solvent content:

<1

##### Viscosity / dynamic:

No data available

(at 25 °C)

#### Further Information

No information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

#### 10.2. Chemical stability

Does not decompose when used for intended uses. No known hazardous decomposition products.

#### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Oxidising agent

#### 10.4. Conditions to avoid

Temperature > 300 °C

#### 10.5. Incompatible materials

Acid, Oxidising agent

#### 10.6. Hazardous decomposition products

Carbon monoxide, aldehydes, Acids, Gases/vapours, toxic

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Acute toxicity

Based on available data, the classification criteria are not met.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran				
	oral	LD50 mg/kg 19800	Rabbit	Publication (1958)	Rabbits were orally gavigated with test ma
	dermal	LD50 mg/kg > 2000	Rat	Study report (2007)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 mg/l ca. 24,6	Rat	AMA Arch. Ind. Hyg. Occ. Med. 10: 61-68	Rats were exposed to 8000 ppm of the tes
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane				
	oral	LD50 mg/kg > 5000	Rat	Study report (1988)	OECD Guideline 401
	dermal	LD50 mg/kg > 2000	Rat	Study report (1988)	OECD Guideline 402
13463-67-7	titanium dioxide				
	oral	LD50 mg/kg > 2000	Rat	Study report (1996)	OECD Guideline 401

#### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

#### Sensitising effects

May cause an allergic skin reaction. (2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran; Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane)

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran					
	Acute fish toxicity	LC50 3,6 mg/l	96 h	Oncorhynchus mykiss	Study report (1982)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Raphidocelis subcapitata	Study report (2007)	OECD Guideline 201
	Acute crustacea toxicity	EC50 2,8 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC 0,3 mg/l	21 d	Daphnia magna	REACH Registration Dossier	OECD Guideline 211
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy) methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Oncorhynchus mykiss	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 1,8 mg/l	72 h	Raphidocelis subcapitata	Study report (1993)	OECD Guideline 201
	Acute crustacea toxicity	EL50 > 1000 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202
	Crustacea toxicity	NOEC 0,3 mg/l	21 d	Daphnia magna	Study report (1984)	OECD Guideline 211
13463-67-7	titanium dioxide					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Carassius auratus	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 > 50 mg/l	72 h	Raphidocelis subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Artemia salina	REACH Registration Dossier	OECD Guideline 202
	Fish toxicity	NOEC >= 80 mg/l	6 d	Danio rerio	REACH Registration Dossier	OECD TG 210
	Algae toxicity	NOEC >= 1 mg/l	32 d	Synedra ulna, Scenedesmus quadricauda, Stigeocloni	Environ. Tox. Chem. 31, 2414-2422 (2012)	In this study, the authors report the re
	Crustacea toxicity	NOEC > 1 mg/l	10 d	Chironomus riparius	REACH Registration Dossier	other: OECD Guideline 219

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	Acute bacteria toxicity	(EC50 > 1000 mg/l)	3 h	activated sludge, domestic	REACH Registration Dossier	OECD Guideline 209
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#### 12.2. Persistence and degradability

No information available.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran				
	OECD 302B	12%		28	
	Not readily biodegradable (according to OECD criteria)				

#### 12.3. Bioaccumulative potential

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran	>= 2,64
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	2,7

#### BCF

CAS No	Chemical name	BCF	Species	Source
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran	31		Study report (2010)
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	150		Other company data (
13463-67-7	titanium dioxide	> 0,47 - < 3,19	Artemia salina	REACH Registration D

#### 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

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No information available.

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

###### **Disposal recommendations**

Dispose of waste according to applicable legislation.

###### **Contaminated packaging**

Non-contaminated packages may be recycled. Dispose of waste according to applicable legislation.

#### SECTION 14: Transport information

##### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	UN 3082
<b><u>14.2. UN proper shipping name:</u></b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b><u>14.3. Transport hazard class(es):</u></b>	9
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

##### **Inland waterways transport (ADN)**

<b><u>14.1. UN number or ID number:</u></b>	UN 3082
<b><u>14.2. UN proper shipping name:</u></b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b><u>14.3. Transport hazard class(es):</u></b>	9
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1

##### **Marine transport (IMDG)**

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

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Special Provisions: 274, 335, 969  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-A, S-F

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID 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 A197 A215  
 Limited quantity Passenger: 30 kg G  
 Passenger LQ: Y964  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 964  
 IATA-max. quantity - Passenger: 450 L  
 IATA-packing instructions - Cargo: 964  
 IATA-max. quantity - Cargo: 450 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes  
 Danger releasing substance: epoxy resin

#### 14.6. Special precautions for user

No information available.

#### 14.7. Maritime transport in bulk according to IMO instruments

No information available.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU regulatory information

Restrictions on use (REACH, annex XVII):  
 Entry 3, Entry 75

##### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:  
 2,2'-[(1-Methylethyliden)bis(4,1-phenyleneoxymethylen)]bisoxiran  
 Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 titanium dioxide

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

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#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,9,11,14,15.

##### 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: International Air Transport Association  
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)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effectice concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

##### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

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

##### 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.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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