

according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 1 of 17

UFI: DP94-W5H3-A7AC-DP34

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

#### 1.1. Product identifier

ARC 855(E) B (Part A), ARC 855(E) G (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, erosion or corrosion; rebuild worn areas; fill holes and cracks; provide abrasion resistant surfaces.

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

number:

#### **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 Aguatic Chronic 2: H411

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

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

### Hazard components for labelling

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

2,2'-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxiran

Quartz - Crystalline Silica

Signal word: Warning



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 2 of 17

#### Pictograms:





#### **Hazard statements**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

DOCO	D = +   +   +   +       +
P260	Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

#### 2.3. Other hazards

No information available.

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 3 of 17

### **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation (EC) No	1272/2008)			
9003-36-5	Reaction mass of 2,2'-[methylenet (oxiran-2-ylmethoxy)benzyl]pheno: [methylenebis(2,1-phenyleneoxym		irane and [2-({ 2-[4-	15 - < 20 %	
	701-263-0		01-2119454392-40		
	Skin Irrit. 2, Skin Sens. 1, Aquatic				
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-ph		10 - < 15 %		
	216-823-5	603-073-00-2	01-2119456619-26		
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens.	1, Aquatic Chronic 2; H315 H319 H3	317 H411		
13463-67-7	titanium dioxide			1 - < 5 %	
	236-675-5	022-006-00-2	01-2119489379-17		
	Carc. 2; H351				
14808-60-7	Quartz - Crystalline Silica			1 - < 5 %	
	238-878-4				
	STOT RE 1; H372				

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	
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	
1675-54-3	216-823-5	2,2´-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxiran	10 - < 15 %
		50 = ca. 24,6 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 19800 rit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100	
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 casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 4 of 17

respiration.

Remove person to fresh air and keep comfortable for breathing.

#### After contact with skin

Take off contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Seek medical advice immediately.

#### 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.

Remove contact lenses, if present and easy to do. Continue rinsing.

#### 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

Causes eye irritation.

Causes skin irritation.

### 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 (CO2)
- 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 (NOx)

#### 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.



according to Regulation (EC) No 1907/2006

### ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 5 of 17

#### **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

#### 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

Absorb with liquid-binding material (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

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

Wear personal protection equipment (refer to section 8).

Keep container tightly closed.

Take off contaminated clothing and wash it before reuse.

# Advice on protection against fire and explosion

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

### 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.

Use protective skin cream before handling the product.

#### 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 and feedingstuffs
- Oxidising agent



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 6 of 17

### 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

### **Occupational exposure limits**

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
14808-60-7	Quartz, respirable dust (crystalline silica)	-	0.1		TWA (8 h)	
409-21-2	Silicon carbide, respirable dust	-	3		TWA (8 h)	
13463-67-7	Titanium dioxide, respirable dust	ı	4		TWA (8 h)	



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 7 of 17

#### **DNEL/DMEL values**

CAS No Substance			
DNEL type	Exposure route	Effect	Value
409-21-2 Silicon carbide			
Worker DNEL, acute	inhalation	systemic	94 mg/m³
Consumer DNEL, acute	inhalation	systemic	23 mg/m³
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-phenyleneoxymetoxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [imethylenebis(2,1-phenyleneoxymethylene)]dioxirane		2-({ 2-[4-	
Worker DNEL, long-term	inhalation	systemic	29,39 mg/m³
Worker DNEL, long-term	dermal	systemic	104,15 mg/kg bw/day
Worker DNEL, long-term	inhalation	local	0,0083 mg/m³
Consumer DNEL, long-term	inhalation	systemic	8,7 mg/m³
Consumer DNEL, long-term	dermal	systemic	62,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	6,25 mg/kg bw/day
1675-54-3 2,2´-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bis	oxiran		
Worker DNEL, long-term	inhalation	local	310 mg/m³
Consumer DNEL, long-term	inhalation	local	55 mg/m³
Worker DNEL, long-term	inhalation	systemic	4,93 mg/m³
Worker DNEL, long-term	dermal	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,87 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,0893 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,5 mg/kg bw/day
13463-67-7 titanium dioxide			
Worker DNEL, long-term	inhalation	local	1,25 mg/m³
Consumer DNEL, long-term	oral	systemic	700 mg/kg bw/day



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 8 of 17

#### **PNEC values**

CAS No	Substance		
Environmenta	I compartment	Value	
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 (in	ntermittent releases)	0,025 mg/l	
Marine water		0 mg/l	
Freshwater se	ediment	0,294 mg/kg	
Marine sedim	ent	0,029 mg/kg	
Micro-organis	ms in sewage treatment plants (STP)	10 mg/l	
Soil		0,237 mg/kg	
1675-54-3	2,2´-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxiran		
Freshwater		0,006 mg/l	
Freshwater (in	ntermittent releases)	0,018 mg/l	
Marine water		0,001 mg/l	
Freshwater se	ediment	0,341 mg/kg	
Marine sedim	0,034 mg/kg		
Secondary po	Secondary poisoning		
Micro-organis	ms in sewage treatment plants (STP)	10 mg/l	
Soil		0,065 mg/kg	

#### 8.2. Exposure controls

### Appropriate engineering controls

No special measures are necessary.

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

### 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), Butyl caoutchouc (butyl rubber)

Thickness of the glove material >= 0,4 mm

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

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.

Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))



according to Regulation (EC) No 1907/2006

### ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 9 of 17

Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))

Observe the wear time limits as specified by the manufacturer.

#### Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

#### 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-P2

#### 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: Liquid

Colour: black or grey

Test method

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability

Solid/liquid: No data available No data available Gas: Lower explosion limits: No data available Upper explosion limits: not applicable Flash point: 249 °C Auto-ignition temperature: No data available Decomposition temperature: No data available pH-Value: not applicable Water solubility: No data available

Solubility in other solvents

No information available.

Partition coefficient n-octanol/water:

Vapour pressure:

Density:

No data available

1,9 - 2 g/cm³

Relative vapour density: >1 (air = 1)

#### 9.2. Other information

#### Information with regard to physical hazard classes



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 10 of 17

Explosive properties

not explosive according to EU A.14

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties Not oxidising.

Other safety characteristics

Evaporation rate: <1 (Ether = 1)

Viscosity / dynamic: 700k mPa·s

(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

The substance is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Heat > 149 °C

### 10.5. Incompatible materials

- Strong alkali,
- Strong acid,
- Oxidising agent

### 10.6. Hazardous decomposition products

- Carbon monoxide,
- aldehydes,
- Acid

### **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.



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 11 of 17

CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
9003-36-5	(oxiran-2-ylmethoxy)benz	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	oral LD50 > 5000 Rat Study report (1988) OECD Guideline 401						
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1988)	OECD Guideline 402			
1675-54-3	2,2'-[(1-Methylethyliden)b	ois(4,1-phenylenoxyme	thylen)]bisoxiran					
	oral	LD50 19800 mg/kg	Rabbit	Publication (1958)	Rabbits were orally gavaged with test ma			
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2007)	OECD Guideline 402			
	inhalation (4 h) vapour	LC50 ca. 24,6 mg/l	Rat	AMA Arch. Ind. Hyg. Occ. Med. 10: 61-68	Rats were exposed to 8000 ppm of the tes			
13463-67-7	titanium dioxide	titanium dioxide						
	oral	LD50 > 2000 mg/kg	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. (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; 2,2'-

[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxiran)

# 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**



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 12 of 17

# 12.1. Toxicity

Toxic to aquatic life with long lasting effects.



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 13 of 17

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
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 mg/l	> 1000	96 h	Oncorhynchus mykiss	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 1,8	72 h	Raphidocelis subcapitata	Study report (1993)	OECD Guideline 201
	Acute crustacea toxicity	EL50 mg/l	> 1000	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
1675-54-3	2,2'-[(1-Methylethyliden)b	ois(4,1-pher	nylenoxymeth	ylen)]bis	oxiran		
	Acute fish toxicity	LC50	3,6 mg/l	96 h	Oncorhynchus mykiss	Study report (1982)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 100	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
13463-67-7	titanium dioxide						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Carassius auratus	REACh Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 50	72 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Artemia salina	REACh Registration Dossier	OECD Guideline 202
	Fish toxicity	NOEC mg/l	>= 80	6 d	Danio rerio	REACh Registration Dossier	OECD TG 210
	Algae toxicity	NOEC mg/l	>= 1	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



according to Regulation (EC) No 1907/2006

ARC 855(E) B (Part A), ARC 855(E) G (Part A)							
Revision date: 23.01.202	23			Page 14 o	f 17		
Acute bact	eria toxicity (EC50 > 1000 mg/l)	3 h activated sludge, domestic	REACh Registration Dossier	OECD Guideline 209			

### 12.2. Persistence and degradability

CAS No	Chemical name					
	Method	Value	d	Source		
	Evaluation	-		*		
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxirar					
	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
	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
1675-54-3	2,2'-[(1-Methylethyliden)bis(4,1-phenylenoxymethylen)]bisoxiran	>= 2,64

### **BCF**

CAS No	Chemical name	BCF	Species	Source
9003-36-5	Reaction mass of 2,2'- [methylenebis(4,1-phenyleneoxymethyl ene)]dioxirane and [2-({ 2-[4- (oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'- [methylenebis(2,1-phenyleneoxymethyl ene)]dioxirane	150		Other company data (
1675-54-3	2,2'- [(1-Methylethyliden)bis(4,1-phenylenoxy methylen)]bisoxiran	31		Study report (2010)
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.

### 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

No information available.



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 15 of 17

### **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)

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):914.4. Packing group:IIIHazard label:9Classification 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)

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):914.4. Packing group:IIIHazard label:9Classification code:M6

Special Provisions: 274 335 375 601

Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

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: 274, 335, 969



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 16 of 17

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):914.4. Packing group:IIIHazard 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: 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

2,2'-[(1-Methylethyliden)bis (4,1-phenylenoxymethylen)] bisoxiran

titanium dioxide



according to Regulation (EC) No 1907/2006

# ARC 855(E) B (Part A), ARC 855(E) G (Part A)

Revision date: 23.01.2023 Page 17 of 17

#### **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 2,4,7,8,10,12,14,15.

#### 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 conernat 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 Refulations 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]

Substitution for mixtures and assure evaluation metrical associating to regulation (ES) no 1212/2000 [SEI ]			
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.
H372	Causes damage to organs (lung) through prolonged or repeated exposure if inhaled.
H411	Toxic to aquatic life with long lasting effects.

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