

according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 1 of 15

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

#### 1.1. Product identifier

Ceramic-Polymer XRC Part A

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

#### Use of the substance/mixture

Coatings and paints, fillers, putties, thinners

#### Uses advised against

No data available

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

Company name: Chesterton International GmbH

Street: Am Lenzenfleck 23

Place: DE-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

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1C

Serious eye damage/eye irritation: Eye Dam. 1 Respiratory or skin sensitisation: Skin Sens. 1

Germ cell mutagenicity: Muta. 2 Reproductive toxicity: Repr. 1B

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects.

May damage fertility.

Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Regulation (EC) No. 1272/2008



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 2 of 15

#### Hazard components for labelling

Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane
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

Signal word: Danger

Pictograms:



Phenol, polymer with formaldehyde, glycidether







#### **Hazard statements**

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.

H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.

### **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

or shower.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

## 2.3. Other hazards

No information available.

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

## 3.2. Mixtures



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 3 of 15

#### **Hazardous components**

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	GHS Classification	•	•		
	Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane				
	701-135-4		01-2120078341-60		
	Muta. 2, Repr. 1B, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1B, Aquatic Chronic 2; H341 H360F H314 H318 H317 H411				
	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				
	701-263-0		01-2119454392-40		
	Skin Irrit. 2, Skin Sens. 1, Aquatic 0				
28064-14-4	Phenol, polymer with formaldehyde, glycidether				
	608-164-0				
	Skin Irrit. 2, Skin Sens. 1, Aquatic 0	Chronic 2; H315 H317 H411			
78-93-3	butanone; ethyl methyl ketone				
	201-159-0	606-002-00-3	01-2119457290-43		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066				

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

## **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

In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

### 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

### 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

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Do NOT induce vomiting.

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

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 4 of 15

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

First Aid, decontamination, treatment of symptoms.

After contact with skin, wash immediately with plenty of Lutrol.

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

### 5.1. Extinguishing media

#### Suitable extinguishing media

Dry extinguishing powder. Carbon dioxide (CO2). alcohol resistant foam. Water spray jet

#### Unsuitable extinguishing media

Full water jet

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

Carbon monoxide Carbon dioxide (CO2). 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.

#### **SECTION 6: Accidental release measures**

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

See protective measures under point 7 and 8.

Provide adequate ventilation.

Personal protection equipment: see section 8

Remove persons to safety.

### 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

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

See protective measures under point 7 and 8.

Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

See section 8. Wear personal protection equipment (refer to section 8). Keep container tightly closed.



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 5 of 15

#### Advice on protection against fire and explosion

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

### 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

### 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

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL

## **Biological Monitoring Guidance Values (EH40)**

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift



according to Regulation (EC) No 1907/2006

# **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 6 of 15

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

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl)-2-hydroxy butane	2,3-epoxypropoxy)methyl) but	ane and 1-(2,3-epo	xypropoxy)-2-
Worker DNEL	long-term	inhalation	systemic	1,17 mg/m³
Worker DNEL	long-term	dermal	systemic	0,67 mg/kg bw/day
,	Reaction mass of 2,2'-[methylenebis(4,1-phenyler (oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxira [methylenebis(2,1-phenyleneoxymethylene)]dioxir	ine and [2,2'-	d [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 DN	EL, long-term	inhalation	systemic	8,7 mg/m³
Consumer DN	Consumer DNEL, long-term		systemic	62,5 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	6,25 mg/kg bw/day
28064-14-4	Phenol, polymer with formaldehyde, glycidether			
Worker DNEL		dermal		104,15 mg/kg bw/day
Worker DNEL		inhalation		29,39 mg/m³
78-93-3	butanone; ethyl methyl ketone			
Consumer DNEL, long-term		oral	systemic	31 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	412 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	106 mg/m³
Worker DNEL, long-term		inhalation	systemic	600 mg/m³
Worker DNEL	long-term	dermal	systemic	1161 mg/kg bw/day



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 7 of 15

#### **PNEC** values

CAS No	Substance	
Environment	al compartment	Value
	Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2 ((2,3-epoxypropoxy)methyl)-2-hydroxy butane	,3-epoxypropoxy)-2-
Freshwater		0,004 mg/l
Freshwater (	intermittent releases)	0,037 mg/l
Freshwater s	ediment	0,02 mg/kg
Marine sedin	nent	0,002 mg/kg
Soil		0,002 mg/kg
	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 s	ediment	0,294 mg/kg
Marine sedin	nent	0,029 mg/kg
Soil		0,237 mg/kg
78-93-3	butanone; ethyl methyl ketone	
Freshwater		55,8 mg/l
Freshwater (	intermittent releases)	55,8 mg/l
Marine water		55,8 mg/l
Freshwater sediment		284,74 mg/kg
Marine sediment 2		284,7 mg/kg
Secondary poisoning 1000 mg		1000 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	709 mg/l
Soil		22,5 mg/kg

### 8.2. Exposure controls

## Appropriate engineering controls

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

### Protective and hygiene measures

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.

### Eye/face protection

Suitable eye protection: Eye glasses with side protection goggles

## **Hand protection**

Tested protective gloves must be worn: EN ISO 374



according to Regulation (EC) No 1907/2006

### **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 8 of 15

NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

Wearing time with permanent contact: Thickness of the glove material: >= 0,4 mm, Breakthrough time (maximum wearing time): >480 min

Wearing time with occasional contact (splashes):: Thickness of the glove material: >= 0,1 mm, Breakthrough time (maximum wearing time) > 30 min

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

Protective clothing

#### Respiratory protection

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

Combination filtering device (EN 14387) A-P3

Self-contained respirator (breathing apparatus) (DIN EN 133)

## **SECTION 9: Physical and chemical properties**

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

Physical state: Liquid
Colour: black
Odour: characteristic

pH-Value: No data available

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available

No data available

Flash point:

> 100 °C

**Flammability** 

Solid: No data available
Gas: No data available

**Explosive properties** 

No information available.

Lower explosion limits:

Upper explosion limits:

No data available

Ignition temperature:

No data available

**Auto-ignition temperature** 

Solid: No data available Gas: No data available



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 9 of 15

Decomposition temperature: No data available

**Oxidizing properties** 

No information available.

Vapour pressure:

Density (at 20 °C):

Vapour pressure:

No data available

~1,3 g/cm³

Water solubility:

No data available

Solubility in other solvents

No information available.

Partition coefficient:

Viscosity / dynamic:

Vapour density:

Evaporation rate:

No data available

No data available

No data available

9.2. Other 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

Exothermic reaction with: Acid, Oxidising agent

#### 10.4. Conditions to avoid

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

#### 10.5. Incompatible materials

Acid, Oxidising agent

### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### **Acute toxicity**

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



according to Regulation (EC) No 1907/2006

### **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 10 of 15

CAS No	Chemical name	Chemical name				
	Exposure route	Dose		Species	Source	Method
	Reaction mass of 1-(2,3-((2,3-epoxypropoxy)meth			2,3-epoxypropoxy)methyl)	butane and 1-(2,3-epoxyp	ropoxy)-2-
	oral	LD50 3 mg/kg	398	Rat	Other company data (1976)	OECD Guideline 401
	dermal	LD50 > mg/kg	3170	Rat	Study report (1976)	OECD Guideline 402
28064-14-4	4 Phenol, polymer with formaldehyde, glycidether					
	oral	LD50 > mg/kg	2000	Rat	Supplier	
	dermal	LD50 > mg/kg	2000	Rabbit	Supplier	
78-93-3	butanone; ethyl methyl ke	etone				
	oral	LD50 > mg/kg	2000	Rat	Supplier	OECD 423
	dermal	LD50 6 8000 mg/kg	3400 -	Rabbit	Supplier	
	inhalation (4 h) aerosol	LC50 3	4,5 mg/l	Rat		

## Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

#### Sensitising effects

May cause an allergic skin reaction. (Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis

((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane;

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; Phenol, polymer with formaldehyde, glycidether)

## Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis

((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

May damage fertility. (Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and

1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

Carcinogenicity: 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.

## **SECTION 12: Ecological information**



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 11 of 15

### 12.1. Toxicity

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
	Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane								
	Acute fish toxicity	LC50	75 mg/l	96 h	Cyprinus carpio	Study report (1996)	OECD Guideline 203		
	Acute algae toxicity	ErC50	9 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2014)	OECD Guideline 201		
	Acute crustacea toxicity	EC50	3,7 mg/l	48 h	Daphnia magna	Study report (2015)	OECD Guideline 202		
28064-14-4	Phenol, polymer with formaldehyde, glycidether								
	Acute fish toxicity	LC50 mg/l	2,54		Leuciscus idus (golden orfe)	Supplier			
	Acute crustacea toxicity	EC50 mg/l	2,55		Daphnia magna (Big water flea)	Supplier			
78-93-3	butanone; ethyl methyl ketone								
	Acute fish toxicity	LC50 mg/l	2993	96 h	Pimephales promelas	Study report (1998)	OECD Guideline 203		
	Acute algae toxicity	ErC50 mg/l	2029	96 h	Pseudokirchneriella subcapitata	Study report (1998)	OECD Guideline 201		
	Acute crustacea toxicity	EC50	308 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202		
	Acute bacteria toxicity	(1150 m	g/l)		Pseudomonas putida	Supplier			

## 12.2. Persistence and degradability

No information available.

Tto information divaliable.				
CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
78-93-3	butanone; ethyl methyl ketone			
	OECD 301	98%	28	
	Readily biodegradable (according to OECD criteria).			

### 12.3. Bioaccumulative potential

No information available.

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane	2,93 - 2530
	(z,3-epoxypropoxy)-z-((z,3-epoxypropoxy)metriyr)-z-nydroxy butane	
78-93-3	butanone; ethyl methyl ketone	0,3

### 12.4. Mobility in soil

No information available.



according to Regulation (EC) No 1907/2006

# **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 12 of 15

#### 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. Other adverse effects

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**

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**14.1. UN number:** UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Reaction mass of 1-

(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

14.3. Transport hazard class(es): 8

14.4. Packing group:IIIHazard label:8Classification code:C9Special Provisions:274Limited quantity:5 LExcepted quantity:E1Transport category:3

Transport category:
Hazard No:
Tunnel restriction code:

Inland waterways transport (ADN)

**14.1. UN number:** UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Reaction mass of 1-

80

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(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

14.3. Transport hazard class(es): 8

14.4. Packing group:IIIHazard label:8Classification code:C9Special Provisions:274Limited quantity:5 LExcepted quantity:E1

Marine transport (IMDG)



according to Regulation (EC) No 1907/2006

**Ceramic-Polymer XRC Part A** 

Revision date: 06.12.2019 Page 13 of 15

**14.1. UN number:** UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Reaction mass of 1-

(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

14.3. Transport hazard class(es):

14.4. Packing group:IIIHazard label:8Marine pollutant:PSpecial Provisional:26

Special Provisions: 223, 274
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B
Segregation group: alkalis

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Reaction mass of 1-

(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane)

14.3. Transport hazard class(es): 8

14.4. Packing group:IIIHazard label:8

Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

1 L

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: epoxy resin

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

## **SECTION 15: Regulatory information**

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

**EU** regulatory information



according to Regulation (EC) No 1907/2006

### **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 14 of 15

Information according to 2012/18/EU

(SEVESO III):

E2 Hazardous to the Aquatic Environment

**National regulatory information** 

**Employment restrictions:** 

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of

child-bearing age.

Water contaminating class (D): 2 - clearly water contaminating

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-

(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane

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

butanone; ethyl methyl ketone

## **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)

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)

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration



according to Regulation (EC) No 1907/2006

## **Ceramic-Polymer XRC Part A**

Revision date: 06.12.2019 Page 15 of 15

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

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

Classification	Classification procedure	
Skin Corr. 1C; H314	Calculation method	
Eye Dam. 1; H318	Calculation method	
Skin Sens. 1; H317	Calculation method	
Muta. 2; H341	Calculation method	
Repr. 1B; H360F	Calculation method	
Aquatic Chronic 2; H411	Calculation method	

#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
<b>⊔360</b> E	May damage fortility

H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### **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.)