# **SAFETY DATA SHEET**

novatio

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

# **COATAPOX A**

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

#### 1.1. Product identifier

Product name	: COATAPOX A
Registration number REACH	: Not applicable (mixture)
Product type REACH	: Mixture

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

1.2.1 Relevant identified uses Coating: component

1.2.2 Uses advised against No uses advised against known

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

#### Supplier of the safety data sheet

#### Manufacturer of the product

Novatech International N.V. Industrielaan 5B B-2250 Olen ☎ +32 14 85 97 37 础 +32 14 85 97 38 info@novatech.be

#### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) : +32 14 58 45 45 (BIG)

# SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008				
Class	Category	Hazard statements		
Skin Sens.	category 1	H317: May cause an allergic skin reaction.		
Skin Irrit.	category 2	H315: Causes skin irritation.		
Eye Irrit.	category 2	H319: Causes serious eye irritation.		
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.		

#### 2.2. Label elements



Contains: formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700); polypropylene glycol, (chloromethyl)oxirane polymer; 1,6-bis(2,3-epoxypropoxy)hexane. Signal word Warning

Jighar word	wanning		
H-statements			
H317	May cause an allergic skin reaction.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation.		
H411	Toxic to aquatic life with long lasting effects.		
P-statements			
P280	Wear protective gloves, protective clothing and	l eye protection/face protection.	
P264	Wash hands thoroughly after handling.		
P302 + P352	IF ON SKIN: Wash with plenty of water and soa	p.	
by: Brandweerinformatied	entrum voor gevaarlijke stoffen vzw (BIG)	Publication date: 2000-12-05	

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG) Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be © BIG vzw Reason for revision: 3.2 9 12

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P333 + P313 P305 + P351 + P338

If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: 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.

P337 + P313 Supplemental information EUH211

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

#### 2.3. Other hazards

No other hazards known

# SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5 500-006-8	20% ≤C<25%	Skin Sens. 1; H317 Skin Irrit. 2; H315 Aquatic Chronic 2; H411	(1)(10)	Constituent	
reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 01-2119456619-26	25068-38-6 500-033-5	5%≤C<10%	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 Eye Irrit. 2; H319: C≥5%, (CLP Annex VI (ATP 0)) Skin Irrit. 2; H315: C≥5%, (CLP Annex VI (ATP 0))	(1)(10)	Constituent	
polypropylene glycol, (chloromethyl) oxirane polymer	9072-62-2	5%≤C<10%	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319	(1)	Constituent	
1,6-bis(2,3-epoxypropoxy)hexane 01-2119463471-41	16096-31-4 240-260-4	5%≤C<10%	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	(1)(10)	Constituent	
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 μm] 01-2119489379-17	13463-67-7 236-675-5	5%≤C<10%	Carc. 2; H351	(1)(2)	Constituent	
quartz (SiO2)	14808-60-7 238-878-4	2.5%≤C<5%	STOT RE 2; H373	(1)(2)	Constituent	

(1) For H- and EUH-statements in full: see section 16

(2) Substance with a Community workplace exposure limit

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

# SECTION 4: First aid measures

#### 4.1. Description of first aid measures

#### General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

#### After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

#### After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

#### After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

#### After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms After inhalation: No effects known. After skin contact:

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Tingling/irritation of the skin. After eye contact: Irritation of the eye tissue. After ingestion: No effects known. 4.2.2 Delayed symptoms No effects known.

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

If applicable and available it will be listed below.

# SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

#### 5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion. Major fire: Water; risk of puddle expansion.

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

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

#### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

# SECTION 6: Accidental release measures

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

No naked flames.

#### 6.1.1 Protective equipment for non-emergency personnel

See section 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034).

See section 8.2

#### 6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

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

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

#### 6.4. Reference to other sections

See section 13.

# SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

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

### 7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Meet the legal requirements. Keep out of direct sunlight. Keep container in a well-ventilated place. Protect against frost.

#### 7.2.2 Keep away from:

Heat sources, reducing agents, oxidizing agents, (strong) bases, (strong) acids, alcohols, amines.

#### 7.2.3 Suitable packaging material:

#### No data available

7.2.4 Non suitable packaging material:

No data available

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

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 Occupational exposure

a) Occupational exposure limit values

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Respirable crystalline silica dust	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.1 mg/m³ (2)
(2): Respirable fraction		
Belgium		
Silices cristallines : quartz (poussières alvéolaires)	Time-weighted average exposure limit 8 h	0.1 mg/m <sup>3</sup>
Titane (dioxyde de)	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	
Respirabel kristallijn silicastof - kwarts	limit value) Time-weighted average exposure limit 8 h (Public occupational exposure	
The Netherlands Respirabel kristallijn silicastof - kwarts France Silices cristallines : cristobalite, quartz, tridymite	limit value) Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	

#### Austria

Austria		
Quarzfeinstaub(alveolengängiges kristallines	Tagesmittelwert (MAK)	0.05 mg/m <sup>3</sup>
Siliziumdioxid)		
Titandioxid (Alveolarstaub)	Tagesmittelwert (MAK)	5 mg/m³
	Kurzzeitwert 60(Miw) 2x (MAK)	10 mg/m³

#### UΚ

UN CN		
Silica, respirable crystalline (respirable fraction)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.1 mg/m³
Titanium dioxide respirable	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m³
Titanium dioxide total inhalable	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m³

#### USA (TLV-ACGIH)

Silica, crystalline - $\alpha$ -quartz and cristobalite	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.025 mg/m <sup>3</sup> (R)
Titanium dioxide - finescale particles	Time-weighted average exposure limit 8 h (TLV - Intended Changes)	2.5 mg/m <sup>3</sup> (R)
Titanium dioxide - nanoscale particles	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.2 mg/m <sup>3</sup> (R)

### (R): Respirable fraction

### b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Crystalline Silica	OSHA	ID 142
Quartz (silica, crystalline, by XRD)	NIOSH	7500
quartz	NIOSH	7601
quartz	NIOSH	7602
Silica, Crystalline, Respirable	NIOSH	7500
Silica, Crystalline	NIOSH	7601
Silica, Crystalline	NIOSH	7602
Silica, Quartz in Coal Dust (Silica in coal mine dust)	NIOSH	7603
TiO2	NIOSH	7302
TiO2	NIOSH	7304

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

**DNEL/DMEL - Workers** 

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Туре	Value	Remark
<u> </u>	<u>.</u>	
Long-term local effects inhalation	0.44 mg/m <sup>3</sup>	
Long-term systemic effects dermal	2.8 mg/kg bw/day	
Long-term local effects dermal	22.6 μg/cm <sup>2</sup>	
Acute local effects dermal	22.6 μg/cm²	
ontaining 1 % or more of particles with aerodynami	c diameter ≤ 10 μm]	
Туре	Value	Remark
Long-term local effects inhalation	1.25 mg/m <sup>3</sup>	
	Long-term systemic effects dermal Long-term local effects dermal Acute local effects dermal containing 1 % or more of particles with aerodynami Type	Long-term systemic effects inhalation $4.9 \text{ mg/m}^3$ Acute systemic effects inhalation $4.9 \text{ mg/m}^3$ Long-term local effects inhalation $0.44 \text{ mg/m}^3$ Long-term systemic effects dermal $2.8 \text{ mg/kg bw/day}$ Long-term local effects dermal $22.6 \mu g/cm^2$ Acute local effects dermal $22.6 \mu g/cm^2$ containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu m$ TypeValue

DNEL/DMEL - General population

1,6-bis(2,3-epoxypropoxy)hexane			
Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	2.9 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	2.9 mg/m <sup>3</sup>	
	Long-term local effects inhalation	0.27 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	1.7 mg/kg bw/day	
	Long-term local effects dermal	13.6 μg/cm²	
	Acute local effects dermal	13.6 μg/cm²	
	Long-term systemic effects oral	0.83 mg/kg bw/day	
	Acute systemic effects oral	0.83 mg/kg bw/day	
titanium dioxide; [in powder form co	ntaining 1 % or more of particles with aerodynamic diame	<u>eter ≤ 10 μm]</u>	
Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term local effects inhalation	210 μg/m³	

PNEC 1,6-bis(2,3-epoxypropoxy)hexane

Compartments	Value	Remark
Fresh water	0.011 mg/l	Similar product
Marine water	0.001 mg/l	Similar product
Fresh water (intermittent releases)	0.115 mg/l	Similar product
STP	1 mg/l	Similar product
Fresh water sediment	0.283 mg/kg sediment dw	Similar product
Marine water sediment	0.028 mg/kg sediment dw	Similar product
Soil	0.223 mg/kg soil dw	Similar product

### 8.1.5 Control banding

If applicable and available it will be listed below.

### 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

#### b) Hand protection:

### Protective gloves against chemicals (EN 374).

	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.35 mm	Class 6	

c) Eye protection: Face shield (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

# SECTION 9: Physical and chemical properties

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

Physical form	Liquid
Viscosity	Viscous
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Variable in colour, depending on the composition
Particle size	Not applicable (liquid)

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Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	4500 mPa.s ; 20 °C
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	> 200 °C
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.6 ; 20 °C
Absolute density	1600 kg/m³ ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	> 100 °C
рН	Not applicable (non-soluble in water)

#### 9.2. Other information

No data available

# SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Heating increases the fire hazard.

#### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reacts violently with (some) bases.

# 10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

#### 10.5. Incompatible materials

Reducing agents, oxidizing agents, (strong) bases, (strong) acids, alcohols, amines.

#### 10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

## SECTION 11: Toxicological information

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

11.1.1 Test results

#### Acute toxicity

<u>COATAPOX A</u>

No (test)data on the mixture available

Judgement is based on the relevant ingredients <u>1,6-bis(2,3-epoxypropoxy)hexane</u>

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	3741 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	NOEL	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation	NOEC	Equivalent to OECD 433	0.035 mg/l	4 h	Rat (male / female)	Experimental value	

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10  $\mu$ m]

ute of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
al	LD50	OECD 401	> 2000 mg/kg bw		· ·	Experimental value	
rmal						Data waiving	
alation (dust)	LC50	OECD 403	> 5.09 mg/l	4 h	Rat (male)	Experimental value	
r	n I I mal	ILD50	ILD50 OECD 401	Image: Non-State         Image: Non-State<	Image: Second	Image: second	Image: Constraint of the second se

#### Conclusion

Not classified for acute toxicity

#### **Corrosion/irritation**

Reason for revision: 3.2 9 12

COATAPOX A

No (test)data on the mixture available

n the relevant ingredients Classification is ha

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Skin	Irritating; category 2					Literature study	
action product: bisp	henol-A-(epichlorh	nydrin) epoxy resin	(number average mo	lecular weight ≤ 700)		•	
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Annex VI	
Skin	Irritating; category 2					Annex VI	
lypropylene glycol,	(chloromethyl)oxir	rane polymer					
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Literature study	
Skin	Irritating; category 2					Literature study	
6-bis(2,3-epoxyprop	oxy)hexane		•				-
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Moderately irritating	Equivalent to OECD 405		24; 48 hours	Rabbit	Experimental value	
Skin	Irritating		24 h	24; 72 hours	Rabbit	Experimental value	
anium dioxide; [in p	owder form conta	ining 1 % or more o	f particles with aeroc	lynamic diameter ≤ 10	<u>[µm]</u>		-
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Equivalent to OECD 404	4 h	48 hours	Rabbit	Experimental value	
clusion uses skin irritation. uses serious eye irri ot classified as irritat tory or skin sensitis: <u>APOX A</u> o (test)data on the n assification is based	ing to the respirat ation nixture available on the relevant inj	gredients	2,3-epoxypropane and	d phenol			
Route of exposure		Method	Exposure time		Species	Value determination	Bomark
noute of exposure	nesun	Wethou	exposure time	point	Species		Kellark
Skin	Sensitizing;					Literature study	

point Skin Sensitizing; category 1 polypropylene glycol, (chloromethyl)oxirane polymer Method Observation time Route of exposure Result Exposure time point

Method

Sensitizing; Skin Literature study category 1 1,6-bis(2,3-epoxypropoxy)hexane

Exposure time

Route of expo	sure Result	Method	•••••	Observation time	Species	Value determination	Remark
Skin	Sensitizing	Equivalent to OECD 429			Mouse (female)	Experimental value	

Observation time

Species

Species

Value determination Remark

Value determination Remark

Annex VI

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Route of exposure Result

				CO		РОХ	Κ <b>Α</b>				
itanium dioxide; [in ]	oowder form	containing 1 % o	r more of	particles	s with aeroo	dynamic c	diameter ≤ :	<u>10 μm]</u>			
Route of exposure	Result	Method		Exposu	ure time	Observ point	ation time	Species	Value o	determination	Remark
Skin	Not sensitiz	ing Equivalent 429	to OECD					Mouse (female)	Experii	mental value	
Inhalation (dust)	Not sensitiz	ing						Mouse (female)	Experi	mental value	
May cause an allergic Not classified as sens <b>ic target organ toxic</b> <u>TAPOX A</u> o (test)data on the m	itizing for inł <b>ity</b>	nalation									
udgement is based o	n the releva										
L,6-bis(2,3-epoxyprop Route of exposur		er Method	Value		Organ	Effe	ct	Exposure time	Sp	ecies	Value determination
Oral (stomach tube)	NOAEL	OECD 422	200 mg bw/day			No e	effect	28 day(s) - 39 da		it (male / male)	Experimental value
Dermal			Dw/ua	/						illale)	Data waiving
Inhalation	NOAEL	OECD 412	16 mg/	′m³ air	Nose	Noe	effect	4 weeks (6h / da	y, 5 Ra	it (male /	Experimental
			<b>.</b>					days / week)		male)	value
itanium dioxide; [in ]	1	-	1	particles	1				I_		
Route of exposur		er Method	Value		Organ	Effe		Exposure time		ecies	Value determinatio
Oral (stomach tube)	NOAEL	OECD 408	> 1000 bw/day	0. 0		No e	effect	90 day(s)		it (male / male)	Experimental value
Dermal											Data waiving
Inhalation (aeros	ol) NOAEC	Subchronic toxicity test	2.1 mg	/m³ air		No e		13 weeks (6h / d 5 days / week)	ay, Ra	it (female)	Experimental value
quartz (SiO2)											
	_				-	- 44			-	•	
Route of exposur	e Paramet	er Method	Value		Organ	Effe	ct	Exposure time	Sp	ecies	Value
Route of exposur Inhalation (dust) Inclusion Not classified for sub				E cat.2	Organ	Effe	ct	Exposure time	Sp	ecies	Value determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of	chronic toxic mixture avai	ity lable nt ingredients		E cat.2	Organ	Effe	ct	Exposure time	Sp	ecies	determination
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the	chronic toxic mixture avai on the releva poxy)hexane	ity lable nt ingredients	STOT R	E cat.2			Effect				determination
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyproj	chronic toxic mixture avai on the releva <u>poxy)hexane</u>	lable nt ingredients	STOT R	Test sub				v	alue dete		determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) TAPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyprop Result Positive itanium dioxide; [in ]	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Of oowder form	ity lable nt ingredients ethod ECD 471 containing 1 % c	STOT R	<b>Test sub</b> Bacteria particle:	strate (S.typhimu s with aeroo	ırium) dynamic c	Effect liameter ≤ 2	ν Ε <u>10 μm]</u>	alue dete	ermination F ntal value	determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) TAPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyprop Result Positive itanium dioxide; [in ] Result	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Of <u>oowder form</u>	ity lable nt ingredients ethod CD 471 containing 1 % c ethod	STOT R	Test sub Bacteria particle: Test sub	strate (S.typhimu s with aeroo strate	ırium) dynamic c	Effect	ν Ε <u>10 μm]</u>	alue dete xperimer	ermination F ntal value ermination F	determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) TAPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyprop Result Positive itanium dioxide; [in ]	chronic toxic mixture avai on the releva <u>coxy)hexane</u> Of <u>cowder form</u> Mi etabolic Of ve	ity lable nt ingredients ethod ECD 471 containing 1 % c	STOT R	Test sub Bacteria particle: Test sub	strate (S.typhimu s with aeroo	ırium) dynamic c	Effect liameter ≤ 2	ν Ε <u>10 μm]</u>	alue dete xperimer	ermination F ntal value	determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L6-bis(2,3-epoxyprop Result Positive ittanium dioxide; [in ] Result Negative with me activation, negati without metaboli	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Mi Of <u>oowder form</u> Mi tabolic Of ve c tabolic Of ve	ity lable nt ingredients ethod CD 471 containing 1 % c ethod	STOT R	Test sub Bacteria particle: Test sub Chinese (CHO)	strate (S.typhimu s with aeroo strate	irium) dynamic c vary	Effect liameter ≤ 2	<mark>ν</mark> Ε <u>10 μm]</u> Ε	alue dete xperimer alue dete xperimer	ermination F ntal value ermination F	determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L6-bis(2,3-epoxypro) Result Positive itanium dioxide; [in 1 Negative with me activation, negati without metaboli activation, negati without metaboli without metaboli	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Mi Of <u>oowder form</u> Mi tabolic Of ve c tabolic Of ve	ity lable nt ingredients ethod ECD 471 containing 1 % c ethod ECD 473	STOT R	Test sub Bacteria particle: Test sub Chinese (CHO)	strate (S.typhimu s with aeroo strate hamster ov	irium) dynamic c vary	Effect liameter ≤ 2	<mark>ν</mark> Ε <u>10 μm]</u> Ε	alue dete xperimer alue dete xperimer	ermination F ntal value ermination F ntal value	determination Literature stu
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L6-bis(2,3-epoxyprop Result Positive itanium dioxide; [in 1 Result Negative with me activation, negati without metaboli activation Negative with me activation, negati without metaboli activation Negative with me activation, negati without metaboli activation Senicity (in vivo) ITAPOX A No (test)data on the	chronic toxic mixture avai on the releva <u>coxy)hexane</u> Of <u>cowder form</u> Mu etabolic Of ve c Of tabolic Of ve c Of mixture avai	ity lable nt ingredients ethod ECD 471 containing 1 % c ethod ECD 473 ECD 473	STOT R	Test sub Bacteria particle: Test sub Chinese (CHO)	strate (S.typhimu s with aeroo strate hamster ov	irium) dynamic c vary	Effect liameter ≤ 2	<mark>ν</mark> Ε <u>10 μm]</u> Ε	alue dete xperimer alue dete xperimer	ermination F ntal value ermination F ntal value	determination Literature stu
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Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L6-bis(2,3-epoxyprop Result Negative with me activation, negati without metaboli activation Negative with me activation, negati without metaboli activation Negative with me activation Negative with Negative with Negative with Negative with Ne	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Mi oowder form Mi etabolic Of ve c Mi etabolic Of ve c Of mixture avai	ity ity lable nt ingredients ethod CD 471 containing 1 % c ethod CD 473 CD 473 CD 471 CD 471 CD 473 CD 471 CD 47	STOT R	Test sub Bacteria particle: Test sub Chinese (CHO) Bacteria	strate (S.typhimu s with aeroo strate hamster ov	irium) dynamic c /ary irium)	Effect liameter ≤ : Effect	ν 10 μm] V E Δ F F F F F F F C C C	alue dete xperimer alue dete xperimer	ermination F ntal value ermination F ntal value ntal value	determination Literature stu Remark Remark
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyprop Result Negative with me activation, negati without metaboli activation Negative with me activation, negati without metaboli activation Result INegative with me activation, negati without metaboli activation Result INERCIPPOX A No (test)data on the Judgement is based of L,6-bis(2,3-epoxyprop Result Negative (oral)	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Mice avai <u>oowder form</u> Mice avai c defined tabolic Of ve c c defined we c c defined we c defined we defined we c defined we c defin	ity lable nt ingredients ethod CD 471 containing 1 % c ethod CD 473 CD 473 CD 473 CD 471 CD 474 CD 475 CD 475 CD 475 CD 475 CD 475 CD 475 CD	STOT R	Test sub Bacteria particles Test sub Chinese (CHO) Bacteria	strate (S.typhimu s with aeroc strate hamster ov (S.typhimu	Irium) dynamic c /ary Irium)	Effect liameter ≤ : Effect Test substu Rat (male)	<mark> 10 μm]                                    </mark>	alue dete xperimer alue dete xperimer	ermination F ntal value ermination F ntal value ntal value	determination Literature stu Remark Remark
Inhalation (dust) Inclusion Not classified for sub- genicity (in vitro) ITAPOX A No (test)data on the Judgement is based of L6-bis(2,3-epoxyprop Result Negative with me activation, negati without metaboli activation Negative with me activation, negati without metaboli activation Negative with me activation Negative with Negative with Negative with Negative with Ne	chronic toxic mixture avai on the releva <u>ooxy)hexane</u> Mice avai <u>oowder form</u> Mice avai c defined tabolic Of ve c c defined we c c defined we c defined we defined we c defined we c defin	ity lable nt ingredients ethod CD 471 containing 1 % c ethod CD 473 CD 473 CD 473 CD 471 CD 474 CD 475 CD 475 CD 475 CD 475 CD 475 CD 475 CD	STOT R	Test sub Bacteria particle: Test sub Chinese (CHO) Bacteria	strate (S.typhimu s with aeroc strate hamster ov (S.typhimu	Irium) dynamic c ary Irium)	Effect liameter ≤ : Effect Test substu Rat (male)	ν 10 μm] V E F F F F F F F F F F F F F	alue dete xperimer alue dete xperimer	ermination F ntal value P ermination F ntal value N ntal value Va	determination Literature stu

Conclusion

Not classified for mutagenic or genotoxic toxicity

#### Carcinogenicity

Reason for revision: 3.2 9 12

Publication date: 2000-12-05 Date of revision: 2022-11-30

Revision number: 0600

#### COATAPOX A

#### No (test)data on the mixture available

The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter  $\leq$  10  $\mu$ m.

#### 1,6-bis(2,3-epoxypropoxy)hexane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination				
Unknown								Data waiving				
titanium dioxide;	tanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]											
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination				
exposure							-					
Inhalation (aerosol)		Equivalent to OECD 453		105 weeks (6h / day, 5 days / week)	Rat (male)	Lung tissue affection/degen eration	Lungs	Experimental value				
Inhalation (aerosol)	NOAEC	Equivalent to OECD 453	5 mg/m³ air	104 weeks (6h / day, 5 days / week)	Rat (male / female)	No carcinogenic effect	Lungs	Experimental value				
Oral (diet)	NOEL	Carcinogenic toxicity study	2500 mg/kg bw/day	103 weeks (7 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value				

#### **Conclusion**

Not classified for carcinogenicity

#### Reproductive toxicity

COATAPOX A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity		OECD 414						Experimental study planned
Maternal toxicity								Data waiving
Effects on fertility		OECD 415						Experimental study planned
nium dioxide; [in powder	form containing	1 % or more of	particles with a	erodynamic diamete	er ≤ 10 μm]			
	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	OECD 414	1000 mg/kg	2 weeks (7 days /	Rat	No effect		Experimental

Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	0, 0	2 weeks (7 days / week)	Rat	No effect	Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	1000 mg/kg bw/day	2 weeks (7 days / week)	Rat	No effect	Experimental value
Effects on fertility (Oral (diet))	NOAEL	OECD 443	≥ 1000 mg/kg bw/day	14 day(s)	Rat (male / female)	No effect	Experimental value

#### **Conclusion**

Not classified for reprotoxic or developmental toxicity

### Toxicity other effects

#### COATAPOX A

No (test)data on the mixture available

#### Chronic effects from short and long-term exposure

<u>COATAPOX A</u>

Skin rash/inflammation.

### 11.2. Information on other hazards

No evidence of endocrine disrupting properties

# SECTION 12: Ecological information

#### 12.1. Toxicity

COATAPOX A

No (test)data on the mixture available Classification is based on the relevant ingredients

Reason for revision: 3.2 9 12

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1.9 mg/l	96 h	Brachydanio rerio	Semi-static system	Fresh water	Weight of evidence
Acute toxicity crustacea	EC50	OECD 202	3.5 mg/l	48 h	Daphnia magna	Static system	Fresh water	Weight of evidence GLP
Toxicity algae and other aquatic plants	EC50	Equivalent to OECD 201	> 1.8 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211		21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value GLP
action product: bisphenol-A-(	epichlorhydrin)	epoxy resin (nur	mber average	molecular weig	<u>ht ≤ 700)</u>			
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinati
Acute toxicity fishes	LC50		1.3 mg/l	96 h	Pisces			Literature study
Acute toxicity crustacea	EC50	OECD 202	2 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value Nominal concentration
Toxicity algae and other aquatic plants	EC50	EPA 660/3 - 75/009	9.4 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Experimental valu Biomass
Long-term toxicity aquatic crustacea	NOEC		0.3 mg/l	21 day(s)	Daphnia sp.			Literature study
6-bis(2,3-epoxypropoxy)hexa	ne							
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinati
Acute toxicity fishes	LC50	OECD 203	30 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental valu Similar product
Acute toxicity crustacea	EC50	OECD 202	39 mg/l - 57 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental valu Similar product
Toxicity algae and other aquatic plants	EC50		23.1 mg/l	48 h	Pseudokirchneri ella subcapitata			QSAR; Similar product
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro- organisms	IC50	OECD 209	> 100 mg/l	180 minutes	Activated sludge	Static system	Fresh water	Experimental valu Similar product
anium dioxide; [in powder for	rm containing 1	% or more of pa	rticles with ae	rodynamic diar	<u>meter ≤ 10 μm]</u>			
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	LC50		> 1000 mg/l		Pisces		Fresh water	
Acute toxicity crustacea	EC50		> 1000 mg/l		Invertebrata		Fresh water	
	EC50	OECD 201	> 100 mg/l	72 h	Pseudokirchneri	Static	Fresh water	Experimental valu
Toxicity algae and other aquatic plants					ella subcapitata	system		Growth rate

### Conclusion

Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Method	Value	Duration	Value determination
EU Method C.4	0 %	28 day(s)	Experimental value
Half-life water (t1/2 water)		•	
Method	Value	Primary degradation/mineralisation	Value determination
OECD 111	86 h; pH = 7		Read-across
action product: bisphenol-A-(ep	ichlorhydrin) epoxy resin (number average mol	ecular weight ≤ 700)	
Biodegradation water			
Method	Value	Duration	Value determination
Method OECD 301F	Value           5 %; Oxygen consumption	Duration 28 day(s)	Value determination           Experimental value
	5 %; Oxygen consumption		
OECD 301F	5 %; Oxygen consumption		
OECD 301F 6-bis(2,3-epoxypropoxy)hexane	5 %; Oxygen consumption		
OECD 301F 6-bis(2,3-epoxypropoxy)hexane Biodegradation water	5 %; Oxygen consumption	28 day(s)	Experimental value
OECD 301F 6-bis(2,3-epoxypropoxy)hexane Biodegradation water Method	5 %; Oxygen consumption Value 47 %; Similar product	28 day(s) Duration	Experimental value
OECD 301F 6-bis(2,3-epoxypropoxy)hexane Biodegradation water Method OECD 301D	5 %; Oxygen consumption Value 47 %; Similar product	28 day(s) Duration	Experimental value

Date of revision: 2022-11-30

BIG number: 34633

**Conclusion** 

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

COATAPOX A

Log Kow Method

hod	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Log Kow							
84-4h - 1		D		Malua		<b>T</b>	
Method		Remark		Value		Temperature	Value determination
OECD 117	incher al A (and	a la la sula sual		2.7 - 3.6		( 700)	Experimental value
	ispnenol-A-(epi	cniorhyd	rin) epoxy resin (numl	ber average molec	uiar weight	<u>≤ /00)</u>	
Log Kow		Remark		Malua		Townseture	
Method		Remark		Value 3		Temperature 25 °C	Value determination Estimated value
lypropylene glyce	ol. (chlorometh	vl)oxirane	e polymer	5		25 C	Estimated value
Log Kow		11/0/11/0/11	<u>porymen</u>				
Method		Remark		Value		Temperature	Value determination
Methou		Remark		-0.3			
5-bis(2,3-epoxypr	ropoxy)hexane			0.5			
BCF fishes							
Parameter	Method		Value	Duration	Species		Value determination
BCF			3.57; Similar product		Pisces		QSAR
Log Kow	•		· · ·				•
Method		Remark		Value		Temperature	Value determination
OECD 107		Similar p	roduct	0.822		20 °C	Experimental value
			ng 1 % or more of part	icles with aerodyn	iamic diamet	<u>er ≤ 10 μm]</u>	• • · · ·
og Kow							
Method		Remark		Value		Temperature	Value determination
		No data	available				
artz (SiO2)							
og Kow				i		1	
Method		Remark		Value		Temperature	Value determination
4. Mobility in	conclusion can		available n based upon the avai s with 1-chloro-2,3-ep				
5 straightforward 4. Mobility in rmaldehyde, olige	conclusion can	be draw	n based upon the avai				
o straightforward 4. Mobility in rmaldehyde, olige (log) Koc	conclusion can	be draw	n based upon the avai	oxypropane and p		Value	Value determination
5 straightforward 4. Mobility in rmaldehyde, olige	conclusion can	be draw	n based upon the avai			Value 3.65	Value determination
o straightforward 4. Mobility in rmaldehyde, olig (log) Koc Parameter log Koc	conclusion can <b>soil</b> omeric reaction	be drawn	n based upon the avai	oxypropane and p			Value determination Experimental value
o straightforward 4. Mobility in rmaldehyde, oligo log) Koc Parameter log Koc lypropylene glyco	conclusion can <b>soil</b> omeric reaction	be drawn	n based upon the avai	oxypropane and p			
o straightforward 4. Mobility in rmaldehyde, oligo log) Koc Parameter log Koc lypropylene glyco	conclusion can <b>soil</b> omeric reaction	be drawn	n based upon the avai	oxypropane and p			
A straightforward 4. Mobility in rmaldehyde, olige log) Koc Parameter log Koc lypropylene glyc: log) Koc Parameter log Koc	conclusion can soil omeric reaction ol, (chloromethy	be drawn	n based upon the avai	OXYPROPANE and p	<u>henol</u>	3.65	Experimental value
o straightforward 4. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc lypropylene glyce (log) Koc Parameter log Koc 5-bis(2,3-epoxypt	conclusion can soil omeric reaction ol, (chloromethy	be drawn	n based upon the avai	OXYPROPANE and p Method OECD 121 Method	<u>henol</u>	3.65 Value	Experimental value Value determination
o straightforward 4. Mobility in rmaldehyde, olige log) Koc Parameter log Koc lypropylene glyce log) Koc Parameter log Koc 5-bis(2,3-epoxypr log) Koc	conclusion can soil omeric reaction ol, (chloromethy	be drawn	n based upon the avai	OXVPROPANE and p Method OECD 121 Method SRC PCKOCW	<u>henol</u>	3.65 Value 0.5 - 0.7	Experimental value Value determination Calculated value
o straightforward 4. Mobility in rmaldehyde, olige log) Koc Parameter log Koc lypropylene glyce log) Koc Parameter log Koc 5-bis(2,3-epoxypr log) Koc Parameter	conclusion can soil omeric reaction ol, (chloromethy	be drawn	n based upon the avai	OXYPTOPANE and p Method OECD 121 Method SRC PCKOCWI	<u>henol</u>	3.65 Value 0.5 - 0.7 Value	Experimental value Value determination Calculated value Value determination
o straightforward 4. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc lypropylene glyce (log) Koc Parameter log Koc 5-bis(2,3-epoxypr (log) Koc	conclusion can soil omeric reaction ol, (chloromethy	be drawn	n based upon the avai	OXVPROPANE and p Method OECD 121 Method SRC PCKOCW	<u>henol</u>	3.65 Value 0.5 - 0.7	Experimental value Value determination Calculated value
A straightforward 4. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc 5-bis(2,3-epoxypr (log) Koc Parameter log Koc Parameter log Koc Clusion	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane	be drawn product: yl)oxirand	n based upon the avai	OXYPTOPANE and p Method OECD 121 Method SRC PCKOCWI	<u>henol</u>	3.65 Value 0.5 - 0.7 Value	Experimental value Value determination Calculated value Value determination
A. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc (log) Koc Parameter log Koc (log) Koc Parameter log Koc (log) Koc Parameter log Koc Parameter log Koc (log) Koc Parameter log Koc S. Results of I ue to insufficien	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane nt(s) with poten nt(s) that adsort PBT and vPvi it data no state	be drawn product: yl)oxirane tial for m b(s) into t B asses ement c	n based upon the avai	OXUPPOPANE AND P Method OECD 121 Method SRC PCKOCWI Method OECD 121	IN v2.0	3.65 Value 0.5 - 0.7 Value 2.98	Experimental value Value determination Calculated value Value determination Experimental value
A. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc 6-bis(2,3-epoxypr (log) Koc Parameter log Koc Parameter log Koc Clusion ontains component s. Results of I	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane nt(s) with poten nt(s) that adsort PBT and vPvi It data no state No 1907/2006	be drawn product: yl)oxirane tial for m b(s) into t <b>B asses</b> ement c 5.	n based upon the avai <u>s with 1-chloro-2,3-ep</u> <u>e polymer</u> <u>hobility in the soil</u> the soil <b>sment</b> an be made whethe	OXUPPOPANE AND P Method OECD 121 Method SRC PCKOCWI Method OECD 121	IN v2.0	3.65 Value 0.5 - 0.7 Value 2.98	Experimental value Value determination Calculated value Value determination Experimental value
A. Mobility in rmaldehyde, oligo (log) Koc Parameter log Koc lypropylene glyco (log) Koc Parameter log Koc 5-bis(2,3-epoxypr (log) Koc Parameter log Koc Parameter log Koc Cusion ontains component ontains component s. Results of I ue to insufficien Regulation (EC)	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane nt(s) with poten nt(s) that adsort PBT and vPvl it data no stat. No 1907/2006 disrupting pr	be drawn product: yl)oxirand tial for m b(s) into t B asses ement c 5. ropertid	n based upon the avai <u>s with 1-chloro-2,3-ep</u> <u>e polymer</u> <u>hobility in the soil</u> the soil <b>sment</b> an be made whether <b>es</b>	OXUPPOPANE AND P Method OECD 121 Method SRC PCKOCWI Method OECD 121	IN v2.0	3.65 Value 0.5 - 0.7 Value 2.98	Experimental value Value determination Calculated value Value determination Experimental value
A. Mobility in rmaldehyde, oligo (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc 5-bis(2,3-epoxypr (log) Koc Parameter log Koc Clusion ontains component ontains component s. Results of I ue to insufficien Regulation (EC) 6. Endocrine (	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane nt(s) with poten nt(s) that adsort <b>PBT and vPvl</b> it data no stat. No 1907/2006 <b>disrupting pr</b> docrine disruptin	be drawn product: yl)oxirand tial for m b(s) into t B asses ement c 5. ropertid	n based upon the avai <u>s with 1-chloro-2,3-ep</u> <u>e polymer</u> <u>hobility in the soil</u> the soil <b>sment</b> an be made whether <b>es</b>	OXUPPOPANE AND P Method OECD 121 Method SRC PCKOCWI Method OECD 121	IN v2.0	3.65 Value 0.5 - 0.7 Value 2.98	Experimental value Value determination Calculated value Value determination
A. Mobility in rmaldehyde, olige (log) Koc Parameter log Koc Parameter log Koc Parameter log Koc Dispropylene glyce (log) Koc Parameter log Koc Parameter log Koc Cusion Intains component intains component intains component s. Results of F ue to insufficien Regulation (EC) 6. Endocrine (co	conclusion can soil omeric reaction ol, (chloromethy ropoxy)hexane nt(s) with poten nt(s) that adsort <b>PBT and vPvl</b> it data no stat. No 1907/2006 <b>disrupting pr</b> docrine disruptin	be drawn product: yl)oxirand tial for m b(s) into t B asses ement c 5. ropertid	n based upon the avai <u>s with 1-chloro-2,3-ep</u> <u>e polymer</u> <u>hobility in the soil</u> the soil <b>sment</b> an be made whether <b>es</b>	OXUPPOPANE AND P Method OECD 121 Method SRC PCKOCWI Method OECD 121	IN v2.0	3.65 Value 0.5 - 0.7 Value 2.98	Experimental value Value determination Calculated value Value determination Experimental value

. . .

Reason for revision: 3.2 9 12

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

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

Groundwater

Groundwater pollutant

# SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 01 11\* (wastes from MFSU and removal of paint and varnish: waste paint and varnish containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Dispose of small quantities of cured product as household waste. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

**European Union** 

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

# SECTION 14: Transport information

#### Road (ADR)

14. <u>1</u> . UN number	
UN number	3082
14.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (reaction
	product: bisphenol-A-(epichlorhydrin) epoxy resin (number
	average molecular weight ≤ 700))
4.3. Transport hazard class(es)	
Hazard identification number	90
Class	9
Classification code	M6
4.4. Packing group	
Packing group	III
Labels	9
4.5. Environmental hazards	
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass)

### Rail (RID)

UN number	3082
4.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
4.3. Transport hazard class(es)	
Hazard identification number	90
Class	9
Classification code	M6
4.4. Packing group	
Packing group	III
Labels	9
4.5. Environmental hazards	
Environmentally hazardous substance mark	yes
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Rea

.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for
	liquids. A package shall not weigh more than 30 kg. (gross mass)

# Inland waterways (ADN)

UN number	3082
4.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
.4.3. Transport hazard class(es)	
Class	9
Classification code	M6
4.4. Packing group	
Packing group	III
Labels	9
4.5. Environmental hazards	
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging fo liquids. A package shall not weigh more than 30 kg. (gross mass)

### Sea (IMDG/IMSBC)

14. <u>1</u> . UN number	
UN number	3082
14.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
14.3. Transport hazard class(es)	
Class	9
14. <u>4. Packing group</u>	
Packing group	Ш
Labels	9
14.5. Environmental hazards	
Marine pollutant	Р
Environmentally hazardous substance mark	yes
14.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	969
Limited quantities	Combination packagings: not more than 5 liters per inner packaging fo liquids. A package shall not weigh more than 30 kg. (gross mass)
14.7. Maritime transport in bulk according to IMO instruments	S
Annex II of MARPOL 73/78	Not applicable, based on available data

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

UN number	3082
14.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
14.3. Transport hazard class(es)	
Class	9
14.4. Packing group	
Packing group	Ш
Labels	9
14. <u>5. Environmental hazards</u>	
Environmentally hazardous substance mark	yes
14.6. Special precautions for user	
Special provisions	A158
Special provisions	A197
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			A215			
Special provisions Special provisions			A213 A97			
Passenger and cargo transport						
Limited quantities: maximum ne	t quantity per packaging		30 kg G			
ION 15: Regulatory in	formation					
5.1. Safety, health and environ		legislation sp	ecific for th	e substance o	r mixture	
European legislation:						
VOC content Directive 2010/75/EU	J					
VOC content			Remark			
25 % - 35 % 400 g/l - 560 g/l						
<u> </u>						
Directive 2012/18/EU (Seveso III) Threshold values under norma	l circumstances					
Substance or category			Low tier	Top tier	Group	For this substance or mixtu
			(tonnes)	(tonnes)		the summation rule has to be applied for:
E2 Hazardous to the Aquatic E	nvironment in Category C	hronic 2	200	500	None	Eco-toxicity
European drinking water standard reaction product: bisphenol-A-(e			no molocular	woight $< 700$		
Parameter	Parametric value	Note	ige molecular	Reference		
Epichlorohydrin	0.1 μg/l			Listed in Anne	ex I, Part B, of D	irective (EU) 2020/2184 on the
						human consumption.
Bisphenol A	2.5 μg/l					irective (EU) 2020/2184 on the human consumption.
polypropylene glycol, (chlorome	thyl)oxirane polymer					
Parameter	Parametric value	Note		Reference		
Epichlorohydrin	0.1 μg/l					irective (EU) 2020/2184 on the human consumption.
	Designation of the substance substances or of the mixture		Conditions of r			
ormaldehyde, oligomeric reaction roducts with 1-chloro-2,3-epoxypropane nd phenol reaction product: bisphenol-A- epichlorhydrin) epoxy resin (number verage molecular weight ≤ 700) 1,6-bis(2,3-epoxypropoxy)hexane	Liquid substances or mixture criteria for any of the followi or categories set out in Anne (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, types A and B, 2.9, 2.10, 2.12 1 and 2, 2.14 categories 1 an to F; (b) hazard classes 3.1 to 3.6, effects on sexual function ar development, 3.8 effects oth effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	ing hazard classes ex I to Regulation 2.6 and 2.7, 2.8 2, 2.13 categories nd 2, 2.15 types A 3.7 adverse nd fertility or on	phases, for exa — tricks and jo — games for oo ornamental asj 2. Articles not ( 3. Shall not be fiscal reasons, ( — can be used — present an a 4. Decorative of by the Europea 5. Without pre- classification, p ensure, before a) lamp oils, lal and indelibly m children"; and, lamps — may l b) grill lighter f and indelibly m life threatening c) lamp oils and	articles intended to imple in ornamental kes, ne or more participa pects, complying with para placed on the mark or perfume, or both as fuel in decorative spiration hazard an iil lamps for supply to form to the Europe an Committee for St judice to the implen backaging and labell the placing on the ri- belled with H304, in harked as follows: "It by 1 December 201 ead to life- threaten luids, labelled with I harked by 1 December 2 lung damage"; d grill lighters, labell	l lamps and ashtri ants, or any article graph 1 shall not et if they contain , if they: e oil lamps for suj d are labelled wit to the general pul an Standard on D andardisation (CE nentation of othe ing of dangerous narket, that the f tended for supply Keep lamps filled 0, "Just a sip of la ing lung damage' r1304, intended for er 2010 as follow ed with H304, int	e intended to be used as such, even we be placed on the market. a colouring agent, unless required for oply to the general public, and, h H304, olic shall not be placed on the market recorative oil lamps (EN 14059) adop N). r Community provisions relating to the substances and mixtures, suppliers so ollowing requirements are met: to the general public are visibly, leg with this liquid out of the reach of imp oil — or even sucking the wick o
reaction product: bisphenol-A- ≥pichlorhydrin) epoxy resin (number verage molecular weight ≤ 700)	Substances falling within one following points: (a) substances classified as a following in Part 3 of Annex' (EC) No 1272/2008: — carcinogen category 1A, 1	ny of the VI to Regulation	Mixtures for ta	ttooing purposes ar	e subject to the r	estrictions of Regulation (EU) 2020/2

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	COATA	νΟΧ Α
	but excluding any such substances classified due to effects only following exposure by	
	inhalation	
	<ul> <li>skin sensitiser category 1, 1A or 1B</li> <li>skin corrosive category 1, 1A, 1B or 1C or</li> </ul>	
	skin corrosive category 1, 1A, 1B of 1C of	
	<ul> <li>serious eye damage category 1 or eye</li> </ul>	
	irritant category 2	
	(b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European	
	Parliament and of the Council	
	(c) substances listed in Annex IV to Regulation	
	(EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h	
	and i of the table in that Annex (d) substances	
	listed in Appendix 13 to this Annex.	
	The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all	
	mixtures for use for tattooing purposes,	
	whether or not they contain a substance	
	falling within points (a) to (d) of this column of this entry.	
	this chury.	
National legislation Belgium COATAPOX A		
No data available		
<u>quartz (SiO2)</u>		
Additional classification		lvéolaires); C; La mention "C" signifie que l'agent en question relève du cha nbre 1993 concernant la protection des travailleurs contre les risques liés à : mutagènes et reprotoxiques au travail.
Agents cancérigènes,		non limitative de substances, mélanges et procédés visés à l'article VI.2-1, a
mutagènes et reprotoxiques	3	
(Code du bien-être au travail,		
Livre VI, titre 2)		
National legislation The Netherland	<u>ls</u>	
Waterbezwaarlijkheid quartz (SiO2)	A (2); Algemene Beoordelingsmethodiel	(ABM)
SZW - Lijst van	silica (respirabel stof, kristallijn); Listed i	SZW-list of carcinogenic substances
kankerverwekkende stoffen		
<u>National legislation France</u> <u>COATAPOX A</u> No data available	montoining 1.0% or more of porticles with	
Catégorie cancérogène	m containing 1 % or more of particles with Titane (dioxyde de), en Ti; C2	
National legislation Germany COATAPOX A		
WGK		ng mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
formaldehyde, oligomeric reacti	on products with 1-chloro-2,3-epoxypropa	ie and phenol
TA-Luft	5.2.5/1	
	epichlorhydrin) epoxy resin (number averag	e molecular weight $\leq$ /00)
TA-Luft polypropylene glycol, (chlorome	5.2.5/I	
TA-Luft 1,6-bis(2,3-epoxypropoxy)hexan	5.2.5	
TA-Luft	5.2.5 m containing 1 % or more of particles with	aerodynamic diameter ≤ 10 μm]
TA-Luft	5.2.5 m containing 1 % or more of particles with	aerodynamic diameter ≤ 10 μm]
TA-Luft titanium dioxide; [in powder for	5.2.5	aerodynamic diameter ≤ 10 μm]
TA-Luft titanium dioxide; [in powder for TA-Luft	5.2.5 m containing 1 % or more of particles with	aerodynamic diameter ≤ 10 μm]
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2)	5.2.5 m containing 1 % or more of particles with 5.2.2/III	aerodynamic diameter ≤ 10 μm]
TA-Luft <u>titanium dioxide; [in powder for</u> TA-Luft <u>quartz (SiO2)</u> TA-Luft National legislation Austria	5.2.5 m containing 1 % or more of particles with 5.2.2/III	aerodynamic diameter ≤ 10 μm]
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2) TA-Luft National legislation Austria <u>COATAPOX A</u> No data available	5.2.5 m containing 1 % or more of particles with 5.2.2/III	
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2) TA-Luft National legislation Austria COATAPOX A No data available quartz (SiO2)	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal	
TA-Luft         titanium dioxide; [in powder for         TA-Luft         quartz (SiO2)         TA-Luft         National legislation Austria         COATAPOX A         No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor         COATAPOX A	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal	
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2) TA-Luft National legislation Austria <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u> Krebserzeugend National legislation United Kingdor <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u>	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal	ines Siliziumdioxid); III C
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2) TA-Luft <u>National legislation Austria</u> <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u> <u>Krebserzeugend</u> <u>National legislation United Kingdor</u> <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u> <u>Coarcinogen</u>	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal n	ines Siliziumdioxid); III C
TA-Luft         titanium dioxide; [in powder for         TA-Luft         quartz (SiO2)         TA-Luft         National legislation Austria <u>COATAPOX A</u> No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor <u>COATAPOX A</u> No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor <u>COATAPOX A</u> No data available         quartz (SiO2)         Carcinogen         Other relevant data	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal n	ines Siliziumdioxid); III C
TA-Luft         titanium dioxide; [in powder for         TA-Luft         quartz (SiO2)         TA-Luft         National legislation Austria         COATAPOX A         No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor         COATAPOX A         No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor         COATAPOX A         No data available         quartz (SiO2)         Carcinogen         Other relevant data	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal n	ines Siliziumdioxid); III C action); Carc Publication date: 2000-12-05
TA-Luft titanium dioxide; [in powder for TA-Luft quartz (SiO2) TA-Luft <u>National legislation Austria</u> <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u> <u>Krebserzeugend</u> <u>National legislation United Kingdor</u> <u>COATAPOX A</u> No data available <u>quartz (SiO2)</u> <u>Coarcinogen</u>	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal n	ines Siliziumdioxid); III C
TA-Luft         titanium dioxide; [in powder for         TA-Luft         quartz (SiO2)         TA-Luft         National legislation Austria <u>COATAPOX A</u> No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor <u>COATAPOX A</u> No data available         quartz (SiO2)         Krebserzeugend         National legislation United Kingdor <u>COATAPOX A</u> No data available         quartz (SiO2)         Carcinogen         Other relevant data	5.2.5 m containing 1 % or more of particles with 5.2.2/III 5.2.7.1.1/II Quarzfeinstaub(alveolengängiges kristal n	ines Siliziumdioxid); III C action); Carc Publication date: 2000-12-05

|--|

No data available

	NO Udla avaliable		
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10 µm]			
	IARC - classification	2B; Titanium dioxide	
	TLV - Carcinogen	Titanium dioxide - finescale particles; A3	
		Titanium dioxide - nanoscale particles; A3	
guartz (SiO2)			
	IARC - classification	1; Silica dust, crystalline, in the form of quartz or cristobalite	
	TLV - Carcinogen	Silica, crystalline - $\alpha$ -quartz and cristobalite: A2	

#### 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

### SECTION 16: Other information

#### Full text of any H- and EUH-statements referred to under section 3:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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