

## SAFETY DATA SHEET

# **RESION EP Floor Coating**

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

## 1.1. Product identifier

Trade name

**RESION EP Floor Coating** 

## Product no.

FS201

#### Unique formula identifier (UFI) SH60-70TT-300A-Y41J

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

## Relevant identified uses of the substance or mixture

Binder

#### Use descriptors (REACH)

Sectors of use	Description
LCS "C"	Consumer uses: Private households (= general public = consumers)
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU 12	Manufacture of plastics products, including compounding and conversion
SU 19	Building and construction work
Product category	Description
PC 9a	Coatings and Paints, Fillers, Putties, Thinners
Process category	Description
PROC 10	Roller application or brushing
PROC 19	Hand-mixing with intimate contact and only PPE available
Article category	Description
AC 13	Plastic articles
Environmental release category	Description
ERC 5	Industrial use resulting in inclusion into or onto a matrix
ERC 8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix

## Uses advised against

None known.

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

#### Company and address

Polyestershoppen BV Oostbaan 680 2841 ML Moordrecht Netherlands +31 85 0220090

Contact person

-E-mail



info@polyestershoppen.nl

Revision

13/12/2023

SDS Version 2.0

Date of previous version 06/07/2023 (1.0)

#### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Irrit. 2; H319, Causes serious eye irritation.
Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard pictogram(s)



Signal word Warning

#### Hazard statement(s)

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

## Precautionary statement(s)

#### General

If medical advice is needed, have product container or label at hand. (P101) Keep out of reach of children. (P102)

## Prevention

Avoid breathing mist/vapour. (P261) Wash hands thoroughly after handling. (P264) Wear eye protection/protective gloves/protective clothing. (P280)

#### Response

IF ON SKIN: Wash with plenty of water and soap. (P302+P352) If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

## Storage

#### ▼ Disposal

Dispose of contents/container in accordance with local regulation (P501)

#### Hazardous substances

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

#### Additional labelling

EUH205, Contains epoxy constituents. May produce an allergic reaction. UFI: SH60-70TT-300A-Y41J



#### 2.3. Other hazards

#### Additional warnings

Contains epoxy constituents. May produce an allergic reaction.

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
bis-[4-(2,3- epoxipropoxi)phenyl]propane	CAS No.: 1675-54-3 EC No.: 216-823-5 UK-REACH: Index No.: 603-073-00-2	25-40%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Aquatic Chronic 2, H411	
Barium sulfate	CAS No.: 7727-43-7 EC No.: 231-784-4 UK-REACH: Index No.:	15-25%		[1]
Reaction mass of 2,2'- [methylenebis(2,1- phenyleneoxymethylene)]bis( oxirane) and 2,2'- [methylenebis(4,1- phenyleneoxymethylene)]bis( oxirane) and 2-({2-[4-(oxiran-2- ylmethoxy)benzyl]phenoxy}m ethyl)oxirane	CAS No.: EC No.: 701-263-0 UK-REACH: Index No.:	5-10%	EUH205 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	
benzyl alcohol	CAS No.: 100-51-6 EC No.: 202-859-9 UK-REACH: Index No.: 603-057-00-5	1-3%	Acute Tox. 4, H302 Acute Tox. 4, H332	[9]
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	CAS No.: 68609-97-2 EC No.: 271-846-8 UK-REACH: Index No.: 603-103-00-4	1-3%	Skin Irrit. 2, H315 Skin Sens. 1, H317	[19]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### ▼ Other information

[1] European occupational exposure limit.

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

## General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

## Inhalation



Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### **Burns**

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

4.3. Indication of any immediate medical attention and special treatment needed If skin irritation or rash occurs: Get medical advice/attention.

## Information to medics

Bring this safety data sheet or the label from this product.

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

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides Carbon oxides (CO / CO2) Some metal oxides

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

#### SECTION 6: Accidental release measures

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

Avoid direct contact with spilled substances. Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

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



Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

## Recommended storage material

Keep only in original packaging.

## Storage temperature

Dry, cool and well ventilated

## Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

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

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Barium sulfate

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10(inhalable)/4(respirable)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10 µm] Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10(inhalable)/4(respirable)

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### DNEL Barium sulfate

banum sunate		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	10 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	10 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	10 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	13000 mg/kg bw/day

benzyl alcohol **Duration: Route of exposure:** DNEL: Long term - Systemic effects - Workers Dermal 9.5 mg/kg Short term - Systemic effects - Workers Dermal 47 mg/kg Long term - Systemic effects - General population Oral 5 mg/kg Short term - Systemic effects - General population Oral 25 mg/kg



Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	0.0893 mg/kg bw/da
Long term – Systemic effects - Workers	Dermal	0.75 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	0.87 mg/m3
Long term – Systemic effects - Workers	Inhalation	4.93 mg/m3
Short term – Systemic effects - General population	Oral	0.5 mg/kg bw/day
titanium dioxide; [in powder form containing 1 % or mo	re of particles with aerodynamic diar	neter ≤ 10 µm]
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	28 µg/m³
Long term – Local effects - Workers	Inhalation	170 µg/m³
<mark>IEC</mark> Barium sulfate		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		115 μg/L
Freshwater sediment		600.4 mg/kg
Sewage treatment plant		62.2 mg/L
Soil		207.7 mg/kg
benzyl alcohol		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1 mg/l
Freshwater sediment		5.27 mg/kg
Marine water		0.1 mg/l
Marine water sediment		0.527 mg/kg
Soil		0.456 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater	Single	0.006 mg/L
Freshwater sediment	Single	0.341 mg/kg
Marine water	Single	0.001 mg/L
Marine water sediment	Single	0.034 mg/kg
Sewage treatment plant	Single	10 mg/L
Soil	Single	0.065 mg/kg

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

## General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### **Exposure scenarios**

There are no exposure scenarios implemented for this product.

## **Exposure limits**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

## Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.



Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

Take off contaminated clothing and wash it before reuse.

#### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

#### Generally

Use only UKCA marked protective equipment.

#### **Respiratory Equipment**

No specific requirements

#### Skin protection

Recommended	Type/Category	Standards	
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-	R

## Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	m

#### Eye protection

Туре	Standards
Safety glasses with side shields.	EN166

## SECTION 9: Physical and chemical properties

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

## **Physical state**

#### Liquid

#### Colour

Beige, sand

## Odour / Odour threshold

## Characteristic

pН

Testing not relevant or not possible due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

Testing not relevant or not possible due to the nature of the product.

#### **Kinematic viscosity**

Testing not relevant or not possible due to the nature of the product.

#### Particle characteristics

Does not apply to liquids.

## Phase changes

#### Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.





## Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

## Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

#### Vapour pressure

Testing not relevant or not possible due to the nature of the product.

#### Relative vapour density

Testing not relevant or not possible due to the nature of the product.

#### Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

#### Data on fire and explosion hazards

#### Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

### Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

#### Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

## Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

#### Solubility

Solubility in water Slightly soluble

#### n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to the nature of the product.

#### Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

## 9.2. Other information

# Other physical and chemical parameters No data available.

## Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No data available.

## 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

## 10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid None known.

## 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

## 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

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

## Acute toxicity



Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	15000 mg/kg
Result.	15000 mg/kg
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	23000 mg/kg
Nesult.	23000 mg/kg
Product/substance	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'- [methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2- ylmethoxy)benzyl]phenoxy}methyl)oxirane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kg
Product/substance	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'- [methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2- ylmethoxy)benzyl]phenoxy}methyl)oxirane
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg
Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
	μm]
Test method:	OECD 401
Species:	Rat, male/female
Route of exposure:	Oral
Test:	LD50
Result:	>2000 mg/kgbw
Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
Test method:	μm] OECD 403
Species:	Rat, male
Route of exposure:	Inhalation
•	
Test: Result:	LC50 (4 hours) >5.09 mg/L
Result.	< 5.05 mg/L
Product/substance	benzyl alcohol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1620 mg/kg
Product/substance	benzyl alcohol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	> 4178 mg/m³
in corrosion/irritation	
	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10
Product/substance	
Product/substance	
	μm]
Test method:	μm] OECD 404
Test method: Species:	μm] OECD 404 Rabbit
Test method:	μm] OECD 404



#### Causes skin irritation.

#### Serious eye damage/irritation

Product/substance	benzyl alcohol
Duration:	No data available.
Result:	Adverse effect observed (Irritating)

## Causes serious eye irritation.

#### **Respiratory sensitisation**

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
	μm]
Test method:	OECD 429
Species:	Mouse, female
Result:	No adverse effect observed (not sensitising)

#### Skin sensitisation

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
μm]
OECD 429
Mouse, female
No adverse effect observed (not sensitising)

#### Germ cell mutagenicity

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
	μm]
Test method:	OECD 473
Species:	Mouse, Chinese Hamster Ovary (CHO)
Conclusion:	No adverse effect observed

#### Product/substance titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10 μm] Test method: OECD 471 Bacteria, S. typhimurium Species: Conclusion: No adverse effect observed

Product/substance titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10 μm] Test method: OECD 474

Species: Conclusion:

Product/substance Test method: Species: Conclusion:

Product/substance Test method: Species: Conclusion:

benzyl alcohol **OECD** 474 Bacteria No adverse effect observed

Adverse effect observed

Mouse, male/female

benzyl alcohol

**OECD** 476

Bacteria

No adverse effect observed

#### Carcinogenicity

Test:

Product/substance

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10 μm] **OESO 453** Test method: Rat, male/female Species: Inhalation Route of exposure: Target organ: Lung Duration: 24 months NOAEC Result: 5 mg/m<sup>3</sup> Conclusion: No adverse effect observed



Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10 $\mu$ m]
Species:	Rat, male/female
Route of exposure:	Oral
Duration:	24 months
Test:	NOAEL
Result:	50000 ppm
Conclusion:	No adverse effect observed

# Reproductive toxicity

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
	μm]
Test method:	OECD 414
Species:	Rat
Duration:	14 days
Test:	NOAEL
Result:	1000 mg/kg bw/day
Conclusion:	No adverse effect observed

Product/substancebenzyl alcoholSpecies:MouseResult:Oral - Positive 750 mg/kg - Notes: 192h

Product/substance	benzyl alcohol
Species:	Mouse
Result:	Oral - Negative 550 mg/kg - Notes: 240h

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### 11.2. Information on other hazards

#### Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

#### Other information

bis-[4-(2,3-epoxipropoxi)phenyl]propane has been classified by IARC as a group 3 carcinogen. titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq$  10 µm] has been classified by IARC as a group 2B carcinogen.

#### **SECTION 12: Ecological information**

#### 12.1. ▼Toxicity

Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	2 mg/L
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Daphnia
Duration:	48 hours
Test:	EC50



Result:	1.8 mg/L
Product/substance Species: Duration: Test: Result:	bis-[4-(2,3-epoxipropoxi)phenyl]propane Algae 72 hours EC50 11 mg/L
Product/substance Test method: Species: Test: Result:	Barium sulfate OECD 203 Fish, Danio rerio LC50 >3,5 mg/L
Product/substance Species: Test: Result:	Barium sulfate Crustacean, Daphnia magna EC50 14,5 mg/L
Product/substance Test method: Species: Result:	Barium sulfate OECD 201 Algae, Pseudokirchneriella subcapitata >100 mg/L
Product/substance Test method: Species: Test: Result:	Barium sulfate OECD 210 Fish, Danio rerio NOEC >100 mg/L
Product/substance Test method: Species: Test: Result:	Barium sulfate OECD 201 Algae, Pseudokirchneriella subcapitata NOEC >100 mg/L
Product/substance Test method: Species: Test: Result:	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'- [methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2- ylmethoxy)benzyl]phenoxy}methyl)oxirane OECD 201 Algae, Pseudokirchneriella subcapitata EC50 >1,8 mg/L
Product/substance Test method: Species: Test:	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'- [methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-{{2-[4-(oxiran-2- ylmethoxy)benzyl]phenoxy}methyl)oxirane OECD 211 Crustacean, Daphnia magna NOEC
Result:	0,3 mg/L
Product/substance Species: Compartment: Test: Result:	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 μm] Fish Freshwater LC50 >1000 mg/L
Product/substance Species:	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 μm] Crustacean
Species.	



Compartment: Test: Result:	Freshwater EC50 >1000 mg/L
Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10
1 Todact/substance	$\mu$ m]
Test method:	OECD 201
Species:	Algae, Pseudokirchneriella subcapitata
Compartment:	Freshwater
Duration:	72 hours
Test:	EC50
Result:	>100 mg/L
Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq$ 10 $\mu$ m]
Test method:	OECD 201
Species:	Algae, Pseudokirchneriella subcapitata
Compartment:	Freshwater
Duration:	72 hours
Test:	NOEC
Result:	>100 mg/L
Product/substance	benzyl alcohol
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	230 mg/L
Product/substance	benzyl alcohol
Species:	Algae
Duration:	72 hours
Result:	700 mg/L
Product/substance	benzyl alcohol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	460 mg/L
Product/substance	benzyl alcohol
Species:	Bacteria
Duration:	24 hours
Test:	EC50
Result:	390 mg/L
Toxic to aquatic life with	
2.2. Persistence and degra	
Product/substance Biodegradable:	benzyl alcohol Yes
2.	stantial
2.3. ▼Bioaccumulative pc Product/substance	Barium sulfate
Product/substance Potential bioaccumulation:	
LogKow:	No data available.
BCF:	<500
Product/substance	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-
	[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-
	ylmethoxy)benzyl]phenoxy}methyl)oxirane
Potential bioaccumulation:	No data available.
LogKow:	3,6
BCF:	No data available.



Product/substance	benzyl alcohol
Potential bioaccumulation:	Yes
LogKow:	No data available.
BCF:	1.37

## 12.4. Mobility in soil

No data available.

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

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. ▼Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

#### 12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## SECTION 13: Disposal considerations

#### 13.1. ▼Waste treatment methods

Product is covered by the regulations on hazardous waste. (\*)

HP 4 - Irritant (skin irritation and eye damage)

HP 13 - Sensitising

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### ▼ EWC code

08

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

## Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

#### **SECTION 14: Transport information**

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3- epoxipropoxi)phenyl]propane)	Transport hazard class: 9 Label: 9 Classification code: M6	III	Yes	Limited quantities: 5 L Tunnel restriction code: (-) See below for additional information.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3- epoxipropoxi)phenyl]propane)	Transport hazard class: 9 Label: 9 Classification code: M6	III	Yes	Limited quantities: 5 L EmS: F-A S-F See below for additional information.



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ΙΑΤΑ	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3- epoxipropoxi)phenyl]propane)	Transport hazard class: 9 Label: 9 Classification code: M6	III	Yes	See below for additional information.

#### \* Packing group

## \*\* Environmental hazards

## Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

#### 14.6. Special precautions for user

Not applicable.

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

No data available.

## **SECTION 15: Regulatory information**

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

## **Restrictions for application**

People under the age of 18 shall not be exposed to this product.

#### Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

## SEVESO - Categories / dangerous substances

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

#### ▼ REACH, Annex XVII

RESION EP Floor Coating is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 3).

#### Additional information

Not applicable.

#### Sources

The Management of Health and Safety at Work Regulations 1999.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

#### 15.2. Chemical safety assessment



#### No

## SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

- EUH205, Contains epoxy constituents. May produce an allergic reaction.
- H302, Harmful if swallowed.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H319, Causes serious eye irritation.
- H332, Harmful if inhaled.
- H411, Toxic to aquatic life with long lasting effects.

#### The full text of identified uses as mentioned in section 1

LCS "C" = Consumer uses: Private households (= general public = consumers)

- LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
- LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- SU 12 = Manufacture of plastics products, including compounding and conversion
- SU 19 = Building and construction work
- PROC 10 = Roller application or brushing
- PROC 19 = Hand-mixing with intimate contact and only PPE available
- PC 9a = Coatings and Paints, Fillers, Putties, Thinners
- AC 13 = Plastic articles

ERC 5 = Industrial use resulting in inclusion into or onto a matrix

ERC 8c = Wide dispersive indoor use resulting in inclusion into or onto a matrix

## Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- CSA = Chemical Safety Assessment
- CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations



UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

# The safety data sheet is validated by H.A.B.

# Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en