Yachtcare Epoxy Base Filler A-Comp.

Version		Revision Date:	Date of last issue: -
1.0	DE / EN	22.08.2022	Date of first issue: 22.08.2022

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

1.1 Product identifier

Trade name : Yachtcare Epoxy Base Filler A-Comp.

Product code : 148.635

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

Use of the Sub-stance/Mixture : Body filler/stopper

Recommended restrictions on use : Industrial use, professional use, public use

1.3 Details of the supplier of the safety data sheet

Company : Vosschemie GmbH
Esinger Steinweg 50
25436 Uetersen
Germany

info@vosschemie.de

Telephone : 04122 717 0
Telefax : 04122 717158

Responsible Department : Laboratory

04122 717 0
sds@vosschemie.de

1.4 Emergency telephone

Telephone : Giftinformationszentrum (GIZ)-Nord,
Göttingen, Deutschland
0551 19240

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal Word : Warning

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

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

Prevention:

P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazardous ingredients which must be listed on the label:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
Oxirane, mono[(C13-15-alkyloxy)methyl] derivs
2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane
Fatty acids, C18-unsatd., trimers, compds. with oleylamine
Fatty acids, tall-oil, compds. with oleylamine

Additional Labeling

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	25068-38-6 500-033-5 603-074-00-8 01-2119456619-26	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411 ——————— specific concentration limit Eye Irrit. 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 %	>= 10 - < 25
Formaldehyde, oligomeric reac-	9003-36-5	Skin Irrit. 2; H315	>= 5 - < 10

tion products with 1-chloro-2,3-epoxypropane and phenol	500-006-8 01-2119454392-40	Skin Sens. 1B; H317 Aquatic Chronic 2; H411	
Titanium dioxide	13463-67-7 236-675-5 01-2119489379-17	Carc. 2; H351	>= 1 - < 5
Oxirane, mono[(C13-15-alkyloxy)methyl] derivs	Not Assigned 939-183-5 01-2119962192-39	Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 1 - < 5
2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane	933999-84-9 618-939-5 01-2119463471-41	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	>= 1 - < 5
Fatty acids, C18-unsatd., trimers, compds. with oleylamine	147900-93-4 604-612-4 01-2119971821-33	Acute Tox. 4; H302 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Chronic 2; H411 --- Acute toxicity estimate Acute oral toxicity: 1.570 mg/kg	>= 0,1 - < 0,5
Fatty acids, tall-oil, compds. with oleylamine	85711-55-3 288-315-1 01-2119974148-28	Eye Dam. 1; H318 Skin Sens. 1A; H317 STOT RE 2; H373	< 0,1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : Move out of dangerous area.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.
Do not leave the victim unattended.
Show this material safety data sheet to the doctor in attendance.

If inhaled : Remove to fresh air.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.
Call a physician immediately.

In case of skin contact : Wash off immediately with soap and plenty of water.
Call a physician if irritation develops or persists.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.
Keep eye wide open while rinsing.
If easy to do, remove contact lens, if worn.
Consult a physician.

If swallowed : Keep respiratory tract clear.
Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Carbon dioxide (CO2)
Dry powder
Water spray jet
Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

Hazardous combustion products : Hazardous decomposition products due to incomplete combustion
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Complete suit protecting against chemicals

Further information : Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Evacuate personnel to safe areas.
Ensure adequate ventilation, especially in confined areas.
Avoid contact with skin, eyes and clothing.
In the case of vapor formation use a respirator with an approved filter.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal considerations see section 13.
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
Keep container closed when not in use.
Wear personal protective equipment.

Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition. Do not smoke.

Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in accordance with the particular national regulations. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
Further information on storage conditions	:	Keep away from heat and sources of ignition. Keep away from direct sunlight. Storage must be in accordance with the BetrSichV (Germany).
Advice on common storage	:	Keep away from food and drink. Avoid amines.
Storage class (TRGS 510)	:	10
Recommended storage temperature	:	2 - 40 °C

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Titanium dioxide	13463-67-7	AGW (Inhalable fraction)	10 mg/m3 (Titanium dioxide)	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW (Alveolate fraction)	1,25 mg/m3 (Titanium dioxide)	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number	Workers	Inhalation	Long-term systemic effects	12,25 mg/m3

average molecular weight ≤ 700)				
	Workers	Skin contact	Long-term systemic effects	8,33 mg/m3
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Workers	Inhalation	Long-term systemic effects	29,39 mg/m3
	Workers	Skin contact	Long-term systemic effects	104,15 mg/kg
	Workers	Skin contact	Long-term local effects	0,0083 mg/cm2
	Consumers	Inhalation	Long-term systemic effects	8,7 mg/m3
	Consumers	Skin contact	Long-term systemic effects	62,5 mg/kg
	Consumers	Oral	Long-term systemic effects	6,25 mg/kg
2,2'-[hexane-1,6-diylbis(oxymethylene)] dioxirane	Workers	Inhalation	Long-term systemic effects	10,57 mg/m3
	Workers	Dermal	Long-term systemic effects	6 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	5,29 mg/m3
	Consumers	Dermal	Long-term systemic effects	3 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	1,5 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Fresh water	0,006 mg/l
	Sea water	0,0006 mg/l
	Fresh water sediment	0,0627 mg/kg
	Sea sediment	0,00627 mg/kg
	Sewage treatment plant	10 mg/l
	Soil	0,0478 mg/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Fresh water	0,003 mg/l
	Sea water	0,0003 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0,294 mg/kg
	Sea sediment	0,0294 mg/kg
	Soil	0,237 mg/kg
2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane	Fresh water	0,011 mg/l

	Sea water	0,001 mg/l
	Fresh water sediment	0,283 mg/l
	Sea sediment	0,028 mg/l
	Sewage treatment plant	1,0 mg/l
	Soil	0,223 mg/kg dry weight (d.w.)

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection
Material : Viton®
Directive : DIN EN 374

Remarks : The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
In case of contact through splashing: Nitrile rubber

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton or heat-resistant synthetic fibres.
Long sleeved clothing

Respiratory protection : Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.
Avoid contact with the skin and the eyes.
Use only with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste

Color	:	white
Odor	:	slight
Melting point/range	:	No data available
Boiling point/boiling range	:	> 200 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 100 °C
Autoignition temperature	:	No data available
pH	:	No data available substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	8.000 - 11.000 mPa.s (20 °C)
Viscosity, kinematic	:	not determined
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Vapor pressure	:	No data available
Density	:	1,8 g/cm3 (20 °C)

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if used as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Polymerization can occur.
Amines and alcohols cause exothermic reactions.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.

10.5 Incompatible materials

Materials to avoid : Incompatible with bases.
Acids
Oxidizing agents

Amines

10.6 Hazardous decomposition products

No decomposition products in case of appropriate storage / handling / transport.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Components:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700):

Acute oral toxicity : LD50 Oral (Rat): 15.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 23.000 mg/kg

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

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402

Titanium dioxide:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LD50 (Rat): > 6,8 mg/l
Exposure time: 4 h

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Acute oral toxicity : LD50 Oral (Rat): 2.189 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : No observed adverse effect concentration: 0,035 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402

Fatty acids, C18-unsatd., trimers, compds. with oleylamine:

Acute oral toxicity : LD50 Oral (Rat): 1.570 mg/kg

Acute toxicity estimate: 1.570 mg/kg
Method: Calculation method

Fatty acids, tall-oil, compds. with oleylamine:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

Skin corrosion/irritation

Causes skin irritation.

Components:

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

Result : Skin irritation

Titanium dioxide:

Remarks : No skin irritation

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Species : Rabbit
Result : Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Titanium dioxide:

Remarks : Dust contact with the eyes can lead to mechanical irritation.

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Eye irritation

Fatty acids, tall-oil, compds. with oleylamine:

Result : Risk of serious damage to eyes.

Respiratory or skin sensitization

Skin sensitization
May cause an allergic skin reaction.

Respiratory sensitization
Not classified based on available information.

Components:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol:
Assessment : The product is a skin sensitizer, sub-category 1B.

Titanium dioxide:
Remarks : No known sensitising effect.

Oxirane, mono[(C13-15-alkyloxy)methyl] derivs:
Result : May cause sensitization by skin contact.

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:
Result : May cause sensitization by skin contact.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine:
Result : May cause sensitization by skin contact.

Fatty acids, tall-oil, compds. with oleylamine:
Result : The product is a skin sensitizer, sub-category 1A.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Components:

Fatty acids, C18-unsatd., trimers, compds. with oleylamine:
Assessment : May cause damage to organs through prolonged or repeated exposure.

Fatty acids, tall-oil, compds. with oleylamine:

Assessment : May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700):

NOAEL : 50 mg/kg
Application Route : Oral

NOAEL : 100 mg/kg
Application Route : Skin contact

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700):

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 1,8 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (algae): 11 mg/l
Exposure time: 72 h

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

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 5,7 mg/l End point: mortality Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2,55 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 1,8 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	IC50 (Bacteria): > 100 mg/l Exposure time: 3 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,3 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Titanium dioxide:

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 48 h

Oxirane, mono[(C13-15-alkyloxy)methyl] derivs:

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 30 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 47 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to microorganisms	:	IC50 : > 100 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

Fatty acids, C18-unsatd., trimers, compds. with oleylamine:

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Fatty acids, tall-oil, compds. with oleylamine:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h

12.2 Persistence and degradability

Components:

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

Biodegradability : Biodegradation: 0 %
Exposure time: 28 d
Method: Regulation (EC) No. 440/2008, Annex, C.4-E

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Biodegradability : Concentration: 2 mg/l
Result: Not biodegradable
Biodegradation: ca. 47 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Fatty acids, tall-oil, compds. with oleylamine:

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

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

Partition coefficient: n-octanol/water : Pow: 2,7

Oxirane, mono[(C13-15-alkyloxy)methyl] derivs:

Partition coefficient: n-octanol/water : log Pow: 6,5 (30 °C)
pH: 6,74
Not applicable

2,2'-[hexane-1,6-diylbis(oxymethylene)]dioxirane:

Partition coefficient: n-octanol/water : log Pow: 0,822 (20 °C)

Fatty acids, C18-unsatd., trimers, compds. with oleylamine:

Partition coefficient: n-octanol/water : log Pow: > 5,7 (20 °C)

Fatty acids, tall-oil, compds. with oleylamine:

Partition coefficient: n- : Pow: 1 - 6,2 (25 °C)

octanol/water	pH: 4 - 9 Method: OECD Test Guideline 117

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information	:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Do not dispose of with domestic refuse. Dispose of in accordance with local regulations. Send to a licensed waste management company. According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
Contaminated packaging	:	Packaging that is not properly emptied must be disposed of as the unused product. Dispose of contents/ container to an approved waste disposal plant.

SECTION 14: Transport information

14.1 UN number or ID number

ADN	:	UN 3082

ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
IATA	:	UN 3082

14.2 UN proper shipping name

ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700))
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700))
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700))
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700))
IATA	:	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)

ADN	:	9
ADR	:	9
RID	:	9
IMDG	:	9
IATA	:	9

14.4 Packing group

ADN

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9

ADR

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)

RID

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9

IMDG

Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous	:	yes

ADR

Environmentally hazardous	:	yes

RID

Environmentally hazardous	:	yes

IMDG

Marine pollutant	:	yes

IATA (Passenger)

Environmentally hazardous	:	yes

IATA (Cargo)

Environmentally hazardous	:	yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	E2	ENVIRONMENTAL HAZARDS

Water hazard class (Germany)	:	WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H351	:	Suspected of causing cancer if inhaled.
H373	:	May cause damage to organs through prolonged or repeated exposure.

H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Carc.	:	Carcinogenicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitization
STOT RE	:	Specific target organ toxicity - repeated exposure
DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method

Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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