

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

1.1. Product identifier

Product form	: Mixture
Product name	: Altro Expand Coloured / Altro Expand Vertical Base
Product code	: E_B____; EV_B____
Product group	: End product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Use of the substance/mixture	: Epoxy Base - Industrial flooring & wall coatings

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Altro Resin Systems
Unit 3 Station Road Industrial Estate
Station Road
GB- DT2 0AE Maiden Newton Dorchester
T 01300 320620
sds@altro.com - www.altro.com

Distributor

Altro Deutschland GmbH & Co. KG
Ebertallee 209
DE- 06846 Dessau-Rosslau
T +49 (0) 340 6500-0
www.altro.com

1.4. Emergency telephone number

Emergency number	: 01462 480480 Monday - Friday 09:00 - 17:00
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360F
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS07

GHS08

GHS09

Signal word (CLP)

: Danger

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Contains	: OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS; Cashew nutshell extract; Bis[4-(2,3-epoxypropoxy)phenyl]propane; Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane
Hazard statements (CLP)	: H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H360F - May damage fertility. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER, a doctor. P308+P313 - IF exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.
EUH-statements	: EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Bis[4-(2,3-epoxypropoxy)phenyl]propane(1675-54-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties 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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bis[4-(2,3-epoxypropoxy)phenyl]propane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 EC Index-No.: 603-073-00-2 REACH-no: 01-2119456619-26	$\geq 15 - < 50$	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	CAS-No.: 9003-36-5 EC-No.: 701-263-0 REACH-no: 01-2119454392-40	$\geq 5 - < 30$	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS	CAS-No.: 68609-97-2 EC-No.: 271-846-8 EC Index-No.: 603-103-00-4 REACH-no: 01-2119454392-40	$\geq 5 - < 15$	Skin Irrit. 2, H315 Skin Sens. 1, H317 Repr. 1B, H360F

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bis(isopropyl)naphthalene	CAS-No.: 38640-62-9 EC-No.: 254-052-6 REACH-no: 01-2119565150-48	≥ 5 – < 10	Asp. Tox. 1, H304 Aquatic Chronic 1, H410 (M=1)
Cashew nutshell extract	CAS-No.: 8007-24-7 EC-No.: 232-355-4 REACH-no: 01-2119502450-57	≥ 3 – < 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Bis[4-(2,3-epoxypropoxy)phenyl]propane	CAS-No.: 1675-54-3 EC-No.: 216-823-5 EC Index-No.: 603-073-00-2 REACH-no: 01-2119456619-26	(5 ≤C ≤ 100) Skin Irrit. 2, H315 (5 ≤C ≤ 100) Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Take off all contaminated clothing and wash its before reuse.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: Causes eye irritation. redness, itching, tears.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. May cause redness and soreness of the mouth and throat. Corrosive burns may appear around the lips.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO2). Dry powder. Water fog. Alcohol-resistant foam.
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Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes. On burning: release of toxic gases/vapours. Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Firefighting instructions : Control run-off water by containing and keeping it out of sewers and watercourses.
Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment. Contain the spilled material by bunding.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in original container. Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS (68609-97-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	17 mg/kg bw/day
Acute - systemic effects, inhalation	29 mg/kg bw/day
Acute - local effects, dermal	68 mg/kg bw/day
Acute - local effects, inhalation	9.8 mg/kg bw/day
Long-term - systemic effects, dermal	3.9 mg/kg bodyweight/day
Long-term - local effects, dermal	1.7 mg/kg bw/day
Long-term - systemic effects, inhalation	13.8 mg/m³
Long-term - local effects, inhalation	0.98 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	10 mg/kg bw/day
Acute - systemic effects, inhalation	7.6 mg/kg bw/day
Acute - systemic effects, oral	1219 mg/kg bw/day
Acute - local effects, dermal	40 mg/kg bw/day
Acute - local effects, inhalation	2.9 mg/m³
Long-term - systemic effects, oral	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.1 mg/m³
Long-term - systemic effects, dermal	2.35 mg/kg bodyweight/day
Long-term - local effects, dermal	1 mg/kg bw/day
Long-term - local effects, inhalation	1.46 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.0072 mg/l
PNEC aqua (marine water)	0.00072 mg/l
PNEC aqua (intermittent, freshwater)	0.072 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	66.77 mg/kg dwt
PNEC sediment (marine water)	6.677 mg/kg dwt
PNEC (Soil)	
PNEC soil	80.12 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	73 mg/m³

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OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)	
Long-term - local effects, inhalation	73 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	3.7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	13 mg/m ³
Long-term - local effects, inhalation	13 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	1.5 µg/l
PNEC aqua (marine water)	0.15 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3 mg/kg dwt
PNEC sediment (marine water)	0.3 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.54 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	41 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
1-Methylimidazole (616-47-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	7.9 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	4.43 mg/kg dwt
PNEC sediment (marine water)	0.443 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.825 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	589.6 mg/l
Bis(isopropyl)naphthalene (38640-62-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2.38 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.4 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.85 mg/kg bodyweight/day

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Bis(isopropyl)naphthalene (38640-62-9)	
Long-term - systemic effects, inhalation	1.48 mg/m ³
Long-term - systemic effects, dermal	0.85 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.000236 mg/l
PNEC aqua (marine water)	0.0000236 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.853 mg/kg dwt
PNEC sediment (marine water)	0.0853 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.171 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	25 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	0.15 mg/l
Cashew nutshell extract (8007-24-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.5 mg/kg bw/day
Long-term - systemic effects, inhalation	0.88 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.25 mg/kg bw/day
Long-term - local effects, dermal	0.25 mg/kg bw/day
Long-term - local effects, inhalation	0.2 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.00582 mg/l
PNEC aqua (marine water)	0.00058 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.97 mg/kg wet weight
PNEC sediment (marine water)	0.088 mg/kg wet weight
PNEC (Soil)	
PNEC soil	6.71 mg/kg wet weight
PNEC (Oral)	
PNEC oral (secondary poisoning)	10 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.75 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.93 mg/m ³

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Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)	
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m³
Long-term - systemic effects, dermal	0.0893 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	0.006 mg/l
PNEC aqua (marine water)	0.001 mg/l
PNEC aqua (intermittent, freshwater)	0.018 mg/l
PNEC aqua (intermittent, marine water)	0.0018 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.341 mg/kg dwt
PNEC sediment (marine water)	0.0341 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0647 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	11 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane (9003-36-5)	
DNEL/DMEL (Workers)	
Acute - local effects, dermal	8.3 µg/cm²
Long-term - systemic effects, dermal	104.15 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	29.39 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	<
Long-term - systemic effects, oral	6.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.7 mg/m³
Long-term - systemic effects, dermal	62.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.003 mg/l
PNEC aqua (marine water)	0.0003 mg/l
PNEC aqua (intermittent, freshwater)	0.0254 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.294 mg/kg dwt
PNEC sediment (marine water)	0.0294 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.237 mg/kg dwt

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Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'=[methylenebis(2,1-phenyleneoxymethylene)]dioxirane (9003-36-5)

PNEC (STP)

PNEC sewage treatment plant	10 mg/l
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Magsil Star 350 (14807-96-6)

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	2.16 mg/m ³
Acute - local effects, inhalation	3.6 mg/m ³
Long-term - systemic effects, dermal	43.2 mg/kg bodyweight/day
Long-term - local effects, dermal	4.54 mg/cm ²
Long-term - systemic effects, inhalation	2.16 mg/m ³
Long-term - local effects, inhalation	3.6 mg/m ³

DNEL/DMEL (General population)

Acute - systemic effects, inhalation	1.08 mg/m ³
Acute - systemic effects, oral	160 mg/kg bodyweight/day
Acute - local effects, inhalation	1.8 mg/m ³
Long-term - systemic effects, oral	160 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.08 mg/m ³
Long-term - systemic effects, dermal	21.6 mg/kg bodyweight/day
Long-term - local effects, dermal	2.27 mg/cm ²
Long-term - local effects, inhalation	1.8 mg/m ³

PNEC (Water)

PNEC aqua (freshwater)	597.97 mg/l
PNEC aqua (marine water)	141.26 mg/l
PNEC aqua (intermittent, freshwater)	597.97 mg/l
PNEC aqua (intermittent, marine water)	141.26 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	31.33 mg/kg dwt
PNEC sediment (marine water)	3.13 mg/kg dwt

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection

8.2.2.2. Skin protection

Skin and body protection:

Avoid contact with skin

Hand protection:

Standard EN 374 - Protective gloves against chemicals.

Other skin protection

Materials for protective clothing:

Keep work clothing separately

8.2.2.3. Respiratory protection

Respiratory protection:

Wear suitable respiratory equipment in case of insufficient ventilation

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Pigmented.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Avoid heat. flames or sparks.

10.5. Incompatible materials

Reactive metals (eg. sodium, calcium, zinc ect). Materials reactive with hydroxyl compounds. Organic acids (e.g. acetic acid, citric acid ect.). Mineral acids, sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agent.

10.6. Hazardous decomposition products

Nitric acid (HNO₃). Ammonia, Nitrogen oxides (NO_x) Nitrogen oxides can react with water vapour to form corrosive nitric acid, Carbon monoxide (CO), Carbon dioxide (CO₂), Aldehydes and flammable hydrocarbon fragments.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS (68609-97-2)	
LD50 dermal rat	> 10000 mg/kg bw/day
Bis(isopropyl)naphthalene (38640-62-9)	
LD50 oral rat	> 4000 mg/kg
LD50 dermal rat	> 4500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 5.64 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Cashew nutshell extract (8007-24-7)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)

LD50 oral rat	15000 mg/kg
LD50 dermal rabbit	23000 mg/kg

Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane (9003-36-5)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)

NOAEL (chronic, oral, animal/male, 2 years)	15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:
NOAEL (chronic, oral, animal/female, 2 years)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:

Reproductive toxicity	: May damage fertility.
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OXIRANE, MONO [(C12-14-ALKYLOXY)METHYL] DERIVS (68609-97-2)

NOAEL (animal/female, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OTS 798.4420 (Preliminary Developmental Toxicity Screen)
NOAEL (animal/female, F1)	200 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OTS 798.4420 (Preliminary Developmental Toxicity Screen)

STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)

NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:
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Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane (9003-36-5)

NOAEL (oral, rat, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Aspiration hazard	: Not classified
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Bis(isopropyl)naphthalene (38640-62-9)

Viscosity, kinematic	12.5 mm ² /s
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11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Not rapidly degradable

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS (68609-97-2)

EC50 72h - Algae [1]	844 mg/l Test species:- Selenastrum capricornutum (Green algae)
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Bis(isopropyl)naphthalene (38640-62-9)

LC50 - Fish [1]	> 0.5 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	> 0.16 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.15 mg/l
NOEC chronic crustacea	0.013 mg/l 21 days

Cashew nutshell extract (8007-24-7)

EC50 72h - Algae [1]	1300 mg/l
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Bis[4-(2,3-epoxypropoxy)phenyl]propane (1675-54-3)

LC50 - Fish [1]	2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	1.8 mg/l Test species:- Daphnia magna
EC50 - Crustacea [2]	2.1 mg/l Test species - Ceriodaphnia dubia
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Reaction mass of 2,2'=[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'=[methylenebis(2,1-phenyleneoxymethylene)]dioxirane (9003-36-5)

LC50 - Fish [1]	> 2.54 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.55 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1.8 mg/l
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation
Waste treatment methods
Ecology - waste materials
HP Code

- : Disposal must be done according to official regulations.
- : Must follow special treatment according to local regulation.
- : Avoid release to the environment.
- : HP3 - "Flammable:"
 - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
 - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
 - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
 - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
 - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
- HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
- HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.
- HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information





In accordance with ADR / IMDG / ADN / RID

ADR	IMDG	ADN	RID
14.1. UN number or ID number			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS)

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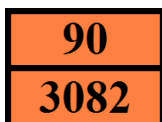
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	ADN	RID
Transport document description			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS), 9, III, MARINE POLLUTANT	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol Formaldehyde Polymer Glycidyl Ether. CONTAINS), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)

: -

Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03

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Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.