

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 15.08.2025

Version number 8 (replaces version 7)

Revision: 15.08.2025

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

1.1 Product identifier

Trade name: **Metalbond component A**

Article number: 30306, 30307_A

UFI: D1Y6-M0CU-X00F-4JMF

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

Product category PC1 Adhesives, sealants

Application of the substance / the mixture Epoxy resin adhesive

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960

Fax. +49(0)911-644456

e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 1A H360FD May damage fertility. May damage the unborn child.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS07 GHS08 GHS09

Signal word

Danger

Hazard-determining components of labelling:

bis[4-(2,3-epoxypropoxy)phenyl]propane
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
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

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H360FD May damage fertility. May damage the unborn child.
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.
P103 Read carefully and follow all instructions.

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P261	Avoid breathing vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Additional information: Contains epoxy constituents. May produce an allergic reaction.
- **2.3 Other hazards**
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Determination of endocrine-disrupting properties For information on endocrine disrupting properties see section 11.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

- Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2 Reg.nr.: 01-2119456619-26-xxxx	bis[4-(2,3-epoxypropoxy)phenyl]propane Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 EUH205 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 %	25-50%
Reg.nr.: 01-2119454392-40-0003	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 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	12.5-25%
CAS: 933999-84-9 Reg.nr.: 01-2119463471-41-0005	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2) Repr. 1A, H360FD Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Aquatic Chronic 3, H412	<12.5%

- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Take affected persons out into the fresh air.
Position and transport stably in side position.
Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.

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- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed**
 - Breathing difficulty
 - Dizziness
 - Headache
 - Dizziness
 - Nausea
 - Allergic reactions
 - Danger of impaired breathing.
- Hazards
- **4.3 Indication of any immediate medical attention and special treatment needed**
 - If swallowed, gastric irrigation with added, activated carbon.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
 - Formation of toxic gases is possible during heating or in case of fire.
 - In case of fire, the following can be released:
 - Carbon monoxide (CO)
 - Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- Protective equipment:
 - Wear fully protective suit.
 - Wear self-contained respiratory protective device.
 - Do not inhale explosion gases or combustion gases.
- Additional information
 - Collect contaminated fire fighting water separately. It must not enter the sewage system.
 - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 - Ensure adequate ventilation
 - Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:**
 - Do not allow to penetrate the ground/soil.
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
 - Dispose of the material collected according to regulations.
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Ensure adequate ventilation.
- **6.4 Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

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SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Keep receptacles tightly sealed.
 Store in cool, dry place in tightly closed receptacles.
 Use only in well ventilated areas.
 Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.
 Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from reducing agents.
 Store away from foodstuffs.

Further information about storage conditions:

Store receptacle in a well ventilated area.
 Keep container tightly sealed.

Storage class:

6.1 D

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs**1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

Oral	DNEL (Kurzzeit-akut)	0.5 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.5 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	8.33 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	3.571 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	0.75 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	0.0893 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	12.25 mg/m³ Air (ARB)
	DNEL (Langzeit-wiederholt)	4.93 mg/m³ Air (ARB)
		0.87 mg/m³ Air (BEV)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-{[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Oral	DNEL (Langzeit-wiederholt)	6.25 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	104.15 mg/kg bw/day (ARB)
		62.5 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	29.39 mg/m³ Air (ARB)
		8.7 mg/m³ Air (BEV)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

Oral	DNEL (Kurzzeit-akut)	0.83 mg/kg bw/day (BEV)
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Dermal	DNEL (Langzeit-wiederholt)	0.83 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	1.7 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	1.7 mg/kg bw/day (ARB)
Inhalative		1.7 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	4.9 mg/m³ Air (ARB)
		2.9 mg/m³ Air (BEV)
	DNEL (Langzeit-wiederholt)	2.9 mg/m³ Air (ARB)
		2.9 mg/m³ Air (BEV)

· **PNECs****1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

PNEC (wässrig)	10 mg/l (KA)
	0.0006 mg/l (MW)
	0.006 mg/l (SW)
	0.018 mg/l (WAS)
PNEC (fest)	0.065 mg/kg Trockengew (BO)
	0.034 mg/kg Trockengew (MWS)
	0.341 mg/kg Trockengew (SWS)

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

PNEC (wässrig)	10 mg/l (KA)
	0.0003 mg/l (MW)
	0.003 mg/l (SW)
	0.025 mg/l (WAS)
PNEC (fest)	0.237 mg/kg Trockengew (BO)
	0.029 mg/kg Trockengew (MWS)
	0.294 mg/kg Trockengew (SWS)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

PNEC (wässrig)	1 mg/l (KA)
	0.00115 mg/l (MW)
	0.0115 mg/l (SW)
	0.115 mg/l (WAS)
PNEC (fest)	0.223 mg/kg Trockengew (BO)
	0.0283 mg/kg Trockengew (MWS)
	0.283 mg/kg Trockengew (SWS)

· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**

Use skin protection cream for skin protection.
 Clean skin thoroughly immediately after handling the product.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
 Not necessary if room is well-ventilated.
 Short term filter device:

· **Respiratory protection:**

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· Hand protection

Filter A/P2

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Skin protection recommendation for skin cleaning after product handling:

Kresto Classic (<http://debstoko.com>)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Chloroprene rubber, CR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

Value for the permeation: Level ≤ 6 , 480 min

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

Nitrile rubber, NBR

Camatril (KCL, Art_No. 730, 731, 732, 733)

Dermatril (Art_No. 740, 741, 742)

Chloroprene rubber, CR

Camapren (KCL, Art_No. 720, 722, 726)

· As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

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- Not suitable are gloves made of the following materials: Camatril (KCL, 730, 731, 732, 733)
Chloroprene rubber, CR
- Eye/face protection Leather gloves
Strong material gloves
- Body protection:  Tightly sealed goggles
Protective work clothing

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties**

- General Information
- Colour: Different according to colouring
- Odour: Characteristic
- Melting point/freezing point: Undetermined.
- Boiling point or initial boiling point and boiling range >200 °C
- Flash point: Not applicable.
- Auto-ignition temperature: >300 °C
- Decomposition temperature: > 200 °C °C
- pH Not determined.
- Viscosity: Not applicable
- Kinematic viscosity Not determined.
- Dynamic at 20 °C: 70,000 mPas
- Solubility
- water: Not miscible or difficult to mix.
- Vapour pressure at 20 °C: 2 hPa
- Density and/or relative density
- Density at 20 °C: 1.52 g/cm³

· 9.2 Other information

- Appearance:
- Form: Pasty
- Important information on protection of health and environment, and on safety.
- Ignition temperature: Product is not selfigniting.
- Explosive properties: Product does not present an explosion hazard.
- Solvent content:
- Solids content: 83.0 %

· Information with regard to physical hazard classes

- Explosives Void
- Flammable gases Void
- Aerosols Void
- Oxidising gases Void
- Gases under pressure Void
- Flammable liquids Void
- Flammable solids Void
- Self-reactive substances and mixtures Void
- Pyrophoric liquids Void
- Pyrophoric solids Void
- Self-heating substances and mixtures Void
- Substances and mixtures, which emit flammable gases in contact with water Void

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· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity	No further relevant information available.
· 10.2 Chemical stability	
· Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
· 10.3 Possibility of hazardous reactions	May produce violent reactions with bases and numerous organic substances including alcohols and amines. Reacts with strong acids. Reacts with reducing agents.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	No further relevant information available.
· 10.6 Hazardous decomposition products:	Irritant gases/vapours

SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
· <u>Acute toxicity</u>	Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

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

Oral	LD50	15,000 mg/kg (rat) (OECD 420)
Dermal	LD50	23,000 mg/kg (rabbit) (OECD 402)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-{[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

Oral	LD50	8,500 mg/kg (rat)
Dermal	LD50	>4,900 mg/kg (rabbit)
	LC50/48h	23.1 mg/l (algae)

· <u>Primary irritant effect:</u>	Causes skin irritation.
· <u>Skin corrosion/irritation</u>	Causes serious eye irritation.
· <u>Serious eye damage/irritation</u>	May cause an allergic skin reaction.
· <u>Respiratory or skin sensitisation</u>	Based on available data, the classification criteria are not met.
· <u>Germ cell mutagenicity</u>	Based on available data, the classification criteria are not met.
· <u>Carcinogenicity</u>	May damage fertility. May damage the unborn child.
· <u>Reproductive toxicity</u>	Based on available data, the classification criteria are not met.
· <u>STOT-single exposure</u>	Based on available data, the classification criteria are not met.
· <u>STOT-repeated exposure</u>	Based on available data, the classification criteria are not met.
· <u>Aspiration hazard</u>	Based on available data, the classification criteria are not met.

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· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information**· 12.1 Toxicity**

· Aquatic toxicity:

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

IC50	>100 mg/l (BES)
EC10/16h	100 mg/l (pseudomonas putida)
EC50/48h	1.8 mg/l (daphnia magna) (OECD 202)
NOELR/72h	4.2 mg/l (SW) (EPA-660/3-75-009)
NOEC/21d	0.3 mg/l (daphnia magna) (OECD 211)
EC50/72h	11 mg/l (selenastrum capricornutum) (EPA 660/3-75-009)
LC50/96h	2 mg/l (Oncorhynchus mykiss) (OECD 203)

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-{[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

EC50/48h	2.55 mg/l (daphnia magna)
EC50/72h	1.8 mg/l (Selenastrum capricornutum)
LC50/96h	2.54 mg/l (Leuciscus idus)

933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

EC50/48h	23.1 mg/l (algae)
	67 mg/l (daphnia magna)
LC50/96h	30 mg/l (Leuciscus idus)

· 12.2 Persistence and**degradability**

No further relevant information available.

· 12.3 Bioaccumulative potential

No further relevant information available.

· 12.4 Mobility in soil

No further relevant information available.

· 12.5 Results of PBT and vPvB assessment

· PBT:

Not applicable.

· vPvB:

Not applicable.

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· Remark:

Toxic for fish

· Additional ecological information:

· General notes:

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

SECTION 13: Disposal considerations**· 13.1 Waste treatment methods**

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· European waste catalogue

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
----------	---

20 01 00	separately collected fractions (except 15 01)
----------	---

20 01 27*	paint, inks, adhesives and resins containing hazardous substances
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· Uncleaned packaging:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

· Recommended cleansing agents: Alcohol

SECTION 14: Transport information· **14.1 UN number or ID number**

· ADR, IMDG, IATA

UN3082

· **14.2 UN proper shipping name**

· ADR

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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)

· IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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)

· **14.3 Transport hazard class(es)**

· ADR



· Class

9 (M6) Miscellaneous dangerous substances and articles.

· Label

9

· IMDG, IATA



· Class

9 Miscellaneous dangerous substances and articles.

· Label

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· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	Yes
	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Hazard identification number (Kemler code):	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	(-)
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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), 9, III

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Directive 2012/18/EU	
· Named dangerous substances - ANNEX I	None of the ingredients is listed.
· Seveso category	E2 Hazardous to the Aquatic Environment
· Qualifying quantity (tonnes) for the application of lower-tier requirements	200 t
· Qualifying quantity (tonnes) for the application of upper-tier requirements	500 t
· REGULATION (EC) No 1907/2006 ANNEX XVII	Conditions of restriction: 3

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· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 0.0 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

* SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Department issuing SDS: Laboratory

· Date of previous version: 26.03.2025

· Version number of previous version:

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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 1A: Reproductive toxicity – Category 1A

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

EU