Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.07.2021 Revision: 09.07.2020

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

· **1.1 Product identifier**

· **Trade name:** **HADALAN LF51 12E, Komp. A**

· **Article number:** 40282A
· **UFI:** V080-70Y6-Q00H-CYDQ
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture**
Solvent-free, 2-component, water-thinnable epoxy resin paint for floors and walls

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Sievert Baustoffe GmbH & Co. KG
Mühleneschweg 6
D-49090 Osnabrück
Tel.: +49 2363 5663-0

· **Further information obtainable from:**
Abteilung: Produktsicherheit
Tel.. +49 2363 5663-0
info-hahne@sievert.de
· **1.4 Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**



GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Epoxid-Polyamin Addukt Emulsion
· **Hazard statements**
H318 Causes serious eye damage.
· **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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P302+P352 IF ON SKIN: Wash with plenty of soap and 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.
P312 Call a POISON CENTER/doctor if you feel unwell.

· **Additional information:**
Safety data sheet available on request.
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of the substances listed below with harmless additions

· **Dangerous components:**		
CAS: 238080-05-2	Epoxid-Polyamin Addukt Emulsion Eye Dam. 1, H318; Acute Tox. 4, H302	10-25%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide Carc. 2, H351	2.5-10%

· **Additional information:**
For the wording of the listed hazard phrases refer to section 16.
GISCODE: RE 1 (Komp. A + B)

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
not applicable, product is not flammable
· **5.2 Special hazards arising from the substance or mixture** Nitrogen oxides (NOx)
· **5.3 Advice for firefighters**
· **Protective equipment:** Wear fully protective suit.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Remove people. Provide adequate ventilation.

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· **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
· **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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
· **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 unopened original container.
· **Information about storage in one common storage facility:** Do not store together with acids.
· **Further information about storage conditions:**
Keep container tightly sealed.
Protect from frost.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Additional information about design of technical facilities:** No further data; see item 7.
· **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.

13463-67-7 titanium dioxide (2.5-10%)	
WEL	Long-term value: 10* 4** mg/m³ *total inhalable **respirable

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

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
· **Respiratory protection:** Not required.
· **Protection of hands:**
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**
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

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application.
Recommendation: rubber gloves with cotton inner fabric.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Colour:	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value at 20 °C:**	8.9
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Fully miscible.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Water:	40.0 %
Solids content:	70.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

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· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** Strong exothermic reaction with acids.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** Nitric acid. Ammonia. Nitrogen oxides. Carbon monoxide.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation**
Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Additional toxicological information:**
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **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.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

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.

· **European waste catalogue**	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number** · **ADR, IMDG, IATA**	- Void
· **14.2 UN proper shipping name** · **ADR, IMDG, IATA**	- Void
· **14.3 Transport hazard class(es)** · **ADR, ADN, IMDG, IATA** · **Class**	- Void
· **14.4 Packing group** · **ADR, IMDG, IATA**	- Void
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	Not dangerous according to the above specifications.
· **UN "Model Regulation":**	Void

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.
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **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.

· **National regulations:**

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**
· **VOC (EU)**
The product is subject to RL 2004/42 / EG.
EU limit value for this product is in the ready-to-use condition: Cat. A / j 140 g / l (2010). The product when used, contains: max. 1 g / l VOC.
· **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.

· **Relevant phrases**
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.

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· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport 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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - oral – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Carc. 2: Carcinogenicity – Category 2

Safety data sheet
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Printing date 03.03.2021 Revision: 17.11.2020

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

· **1.1 Product identifier**

· **Trade name: HADALAN LF51 12E, Komp. B**

· **Article number:** 40282B
· **UFI:** KW70-R08T-E001-PMTN
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture**
Dvousložková, vodou ředitelná epoxidová barva bez obsahu rozpouštědel pro podlahy a stěny, vnější a vnitřní.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Sievert Baustoffe GmbH & Co. KG
Mühleneschweg 6
D-49090 Osnabrück
Tel.: +49 2363 5663-0

· **Further information obtainable from:**
Abteilung: Produktsicherheit
Tel.. +49 2363 5663-0
info-hahne@sievert.de
· **1.4 Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**



GHS09 environment

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



GHS07

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.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**



GHS07 GHS09

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· **Signal word** Warning

· **Hazard-determining components of labelling:**
bis[4-(2,3-epoxypropoxy)phenyl]propane
formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
oxirane, mono[(C12-14-alkyloxy)methyl] derivs

· **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
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.
P262 Do not get in eyes, on skin, or on clothing.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P360 Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

· **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.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Compound of following substances with innocuous constituents.

· **Dangerous components:**

CAS: 1675-54-3 EINECS: 216-823-5	bis[4-(2,3-epoxypropoxy)phenyl]propane Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-100%
CAS: 9003-36-5	formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
CAS: 68609-97-2 EINECS: 271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%

· **Additional information:**
For the wording of the listed hazard phrases refer to section 16.
GISCODE: RE 1 (Part A + B)

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **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:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
Use fire fighting measures that suit the environment.
· **For safety reasons unsuitable extinguishing agents:** Full water jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** In case of fire: breathing protection with independent air supply.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Keep unprotected persons away. Ensure adequate ventilation.
· **6.2 Environmental precautions:**
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:** Pick up mechanically.
· **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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Only store in original containers.
· **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:** Keep cool and dry.
· **Information about storage in one common storage facility:** Store separate from eatables.
· **Further information about storage conditions:**
Keep container tightly sealed.
Keep container tightly closed.
· **Storage class:** VCI:10
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Additional information about design of technical facilities:** No further data; see item 7.
· **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.
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:** With sufficient ventilation is not required.
· **Protection of hands:**
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
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.
Recommended: nitrile gloves or butyl rubber
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Colour:	According to product specification colorless
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	n.a.
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>200 °C
· **Flash point:**	120 °C
· **Flammability (solid, gas):**	Not determined.
· **Ignition temperature:**	450 °C
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure at 50 °C:**	<5 hPa
· **Density at 20 °C:**	1.13 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Insoluble.

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· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **9.2 Other information**	No further relevant information available.

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 according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** Keep away from strongly acidic and alkaline materials as well as oxidizers.
· **10.6 Hazardous decomposition products:**
At high temperatures it can develop carbon dioxide, carbon monoxide, oxides of nitrogen and smoke.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
Acute oral toxicity
Very low oral toxicity. Harmful effects are produced if small amounts are swallowed
not expected.
As a product. Oral LD50 (single dose) has not been determined. Based on Information for component (s):
LD50, rat,> 10,000 mg / kg (estimated)
Acute dermal toxicity
Skin resorption of harmful amounts is unlikely after prolonged exposure.
As a product. Dermal LD50: not determined. Based on information for component (s):
LD50, rabbit,> 5,000 mg / kg (estimated)
Acute inhalation toxicity
Excessive exposure may cause upper respiratory tract irritation.
The LC50 has not been determined
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
· **Additional toxicological information:**
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
2,2 '- ((1-methylethylidene) bis (4,1-phenyleneoxymethylene)) bis-oxirane
Acute fish toxicity

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The product is toxic to aquatic organisms (LC50 / EC50 / IC50 between 1 and 10 mg / l for the most sensitive Species).
LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 h, 2 mg / l
Acute toxicity to aquatic invertebrates
EC50, Daphnia magna (Big water flea), static test, 48 h, 1.8 mg / l
Acute toxicity to algae / aquatic plants
ErC50, Scenedesmus capricornutum (freshwater algae), static test, 72 h, growth rate inhibition, 11 mg / l
Toxicity to bacteria
IC50, bacteria, 18 h,> 42.6 mg / l
Chronic toxicity to aquatic invertebrates
MATC value (Maximum Acceptable Toxicant Level), Daphnia magna (Large water flea), semi-static Test, 21 d, number of offspring, 0.55 mg / l
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
Acute fish toxicity
The product is toxic to aquatic organisms (LC50 / EC50 / IC50 between 1 and 10 mg / l for the most sensitive Species).
LC50, freshwater fish, 96 h, 2.54 mg / l
Acute toxicity to aquatic invertebrates
EC50, Daphnia magna, Static, 48 h,> 1,000 mg / l, OECD Test Guideline 202 or equivalent
Acute toxicity to algae / aquatic plants
EC50, Selenastrum capricornutum (green algae), static, 72 h,> 1.8 mg / l, OECD test guideline 201
Toxicity to bacteria
Activated sludge, static, 3 h, other,> 100 mg / l
Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna, semi-static test, 21 d, number of offspring, 0.3 mg / l
Oxirane, mono [(C12-14-alkyloxy) methyl] derivatives
Acute fish toxicity
The material is not harmful to aquatic organisms (LC50 / EC50 / IC50 / LL50 / EL50> 100 mg / L for the most sensitive species).
LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 h,> 5,000 mg / l
LC50, Lepomis macrochirus (blue sunfish), static test, 96 h, 1,800 mg / l, other guidelines
Acute toxicity to algae / aquatic plants
EbC50, Pseudokirchneriella subcapitata (green algae), 72 h, growth inhibition (reduction in Cell density), 843 mg / l
NOEC, Pseudokirchneriella subcapitata (green algae), 72 h, growth inhibition (reduction in Cell density), 500 mg / l
Toxicity to bacteria
EC50, activated sludge, static test, 3 h, breathing rate.,> 100 mg / l

· ***Aquatic toxicity:*** *No further relevant information available.*
· ***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.*
· ***Ecotoxical effects:***
· ***Remark:*** *Toxic for fish*
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*
· ***12.6 Other adverse effects*** *No further relevant information available.*

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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.

· **European waste catalogue**	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN3082
· **14.2 UN proper shipping name**	
· **ADR**	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), phenol, polymer with formaldehyde, glycidyl ether)
· **IMDG**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl] propane, formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol), MARINE POLLUTANT
· **IATA**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl] propane, formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	9 Miscellaneous dangerous substances and articles.
· **Label**	9
· **14.4 Packing group**	
· **ADR**	III
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Ano 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
· **Stowage Category**	A
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.

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· **Transport/Additional information:**

· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· **Transport category**	3
· **Tunnel restriction code**	E
· **UN "Model Regulation":**	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT = 700), PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER), 9, III

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **National regulations:**

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

· **Other regulations, limitations and prohibitive regulations**
· **VOC (EU)**
The product is subject to RL 2004/42 / EG.
The EU limit value for this product is in the ready-to-use condition: Cat. A / j 140 g / l (2010). The product when used, contains: max. 1 g / l VOC.
· **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.

· **Relevant phrases**
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.
· **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 européen sur le transport 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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2