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

1.1 Product identifier

Trade name

einzA Härter LawiPox, für Epoxidharz-Versiegelung RAL 7032

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

Relevant identified uses of the substance or mixture
Epoxy resin
sealing
Coatings

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
einzA Farben GmbH & Co KG
Junkersstraße 13
30179 Hannover

Telephone no.	+49 (0)511 67490-0
Fax no.	+49 (0)511 67490-20
e-mail	info@einzA.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 2; H411
Eye Irrit. 2; H319
Skin Irrit. 2; H315
Skin Sens. 1; H317

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms


GHS07


GHS09

Signal word
Warning

Hazardous component(s) to be indicated on label:
bis-[4-(2,3-epoxipropoxi)phenyl]propane
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

Hazard statement(s)

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.

Hazard statements (EU)

EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P391	Collect spillage.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
The components of this product are not considered to be a PBT.

vPvB assessment
The components of this product are not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**		**pls. refer to footnote (2)**	
	1675-54-3 216-823-5 603-073-00-2 01-2119456619-26	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 70.00 - < 90.00	wt%
2	**oxirane, mono[(C12-14-alkyloxy)methyl] derivs.**			
	68609-97-2 271-846-8 603-103-00-4 01-2119485289-22	Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 5.00 - < 10.00	wt%
3	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**			
	3101-60-8 221-453-2 - 01-2119959496-20	Aquatic Chronic 2; H411 Skin Sens. 1; H317	>= 5.00 - < 10.00	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.
(2) According to the latest state of knowledge and applying the criteria set out in annex I to Regulation (EC) No 1272/2008 , the aforementioned classification is required. This classification goes beyond the classification set out in table 3, Annex VI to Regulation (CE) No 1272/2008.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Skin Irrit. 2; H315: C >= 5% Eye Irrit. 2; H319: C >= 5%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media
water jet.

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Toxic pyrolysis products; Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters
Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses. Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Is not allowed to be released into the sewerage or water courses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4 Reference to other sections
No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Due to the organic solvents' content of the mixture: Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet [sanding]/[flatting] should be used wherever possible. Avoid inhalation of dust from sanding. For personal protection see section 8.

General protective and hygiene measures
Avoid skin and eye contact. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Advice on protection against fire and explosion
Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Electrical equipment should be protected to the appropriate standard. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Comply with legal health and safety regulations; Prevent unauthorised access. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep away from sources of ignition. No smoking.

Requirements for storage rooms and vessels
Always keep in containers of same material as the original one. Never use pressure to empty: container is not a pressure vessel. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. Observe label precautions.

Incompatible products
Store away from oxidising agents, from strongly alkaline and strongly acid materials.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**			**1675-54-3 216-823-5**	
	dermal	Long term (chronic)	systemic	0.75	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	4.93	mg/m³
2	**oxirane, mono[(C12-14-alkyloxy)methyl] derivs.**			**68609-97-2 271-846-8**	
	dermal	Long term (chronic)	systemic	1	mg/kg/day
	inhalative	Long term (chronic)	systemic	3.6	mg/m³
3	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**			**3101-60-8 221-453-2**	
	dermal	Long term (chronic)	systemic	1	mg/kg/day
	dermal	Short term (acut)	systemic	1	mg/kg/day
	dermal	Long term (chronic)	local	1.6	µg/cm²
	dermal	Short term (acut)	local	1.6	µg/cm²
	inhalative	Long term (chronic)	systemic	3.5	mg/m³
	inhalative	Short term (acut)	systemic	3.5	mg/m³
	inhalative	Long term (chronic)	local	3.5	mg/m³
	inhalative	Short term (acut)	local	3.5	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**			**1675-54-3 216-823-5**	
	oral	Long term (chronic)	systemic	0.5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	89.3	µg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.87	mg/m³
2	**oxirane, mono[(C12-14-alkyloxy)methyl] derivs.**			**68609-97-2 271-846-8**	
	oral	Long term (chronic)	systemic	0.5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	0.5	mg/kg/day
	inhalative	Long term (chronic)	systemic	0.87	mg/m³
3	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**			**3101-60-8 221-453-2**	
	dermal	Long term (chronic)	systemic	0.5	mg/kg/day
	dermal	Short term (acut)	systemic	0.5	mg/kg/day
	dermal	Long term (chronic)	local	0.95	µg/cm²
	dermal	Short term (acut)	local	0.95	µg/cm²
	inhalative	Long term (chronic)	systemic	1.75	mg/m³
	inhalative	Long term (chronic)	local	1.75	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**		**1675-54-3 216-823-5**	
	water	fresh water	0.006	mg/L
	water	marine water	0.001	mg/L
	water	fresh water sediment	0.341	mg/kg dry weight
	water	marine water sediment	0.034	mg/kg dry weight
	soil	-	0.065	mg/kg dry weight
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	11	mg/kg food
2	**oxirane, mono[(C12-14-alkyloxy)methyl] derivs.**		**68609-97-2 271-846-8**	
	water	fresh water	0.106	mg/L
	water	marine water	0.011	mg/L
	water	fresh water sediment	307.16	mg/kg dry weight
	water	marine water sediment	30.72	mg/kg dry weight
	soil	-	1.234	mg/kg dry weight

	sewage treatment plant	-	10.00	mg/L
3	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**		**3101-60-8 221-453-2**	
	water	fresh water	7.5	µg/L
	water	marine water	0.75	µg/L
	water	fresh water sediment	33.54	mg/kg dry weight
	water	marine water sediment	3.354	mg/kg dry weight
	soil	-	11.4	mg/kg dry weight
	sewage treatment plant	-	100	mg/L

8.2 Exposure controls

Appropriate engineering controls
Provide good ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. Filter A2P2 (DIN EN 14387)

Eye / face protection
Wear safety googles to protect against splashes. Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>=	0.7	mm
Breakthrough time	>	480	min
Appropriate Material	nitrile rubber		
Material thickness	>=	0.4	mm
Breakthrough time	>	480	min

Other
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Environmental exposure controls
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
pasty

Colour
light brown

Odour
characteristic

pH value	
reason for missing pH	substance/mixture is non-soluble (in water)

Boiling point / boiling range	
Value	201 °C

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point	
Value	101 °C

Ignition temperature

Value	455	°C

Oxidising properties
Not applicable

Flammability
Not applicable

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available.

Relative vapour density
No data available

Relative density
No data available

Density		
Value	1.12	g/cm³
Reference temperature	20	°C

Solubility in water	
Comments	emulsifiable

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**
log Pow	2.64	-	3.78	
Reference temperature			25	°C
with reference to	pH 7			
Method	OECD 117			
Source	ECHA			
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**		**221-453-2**
log Pow			3.59	
Reference temperature			20	°C
Method	OECD 107			
Source	ECHA			

Kinematic viscosity		
Value	1400	mPa*s
Reference temperature	20	°C
Type	dynamic	

Solvent separation test
Not applicable

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage and handling conditions (See section 7).

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
LD50	> 2000 mg/kg bodyweight		
Species	rat		
Method	OECD 420		
Source	ECHA		
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**	**221-453-2**
LD50	> 2000 mg/kg bodyweight		
Species	rat		
Method	OECD 425		
Source	ECHA		

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
LD50	> 2000 mg/kg bodyweight		
Species	rat		
Method	OECD 402		
Source	ECHA		
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**	**221-453-2**
LD50	> 2000 mg/kg bodyweight		
Species	rabbit		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity
No data available

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	low-irritant		
Evaluation/classification	The classification is according to the current version of the harmonized classification found in Annex VI of Regulation EC 1272/2008.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	The classification is according to the current version of the harmonized classification found in Annex VI of Regulation EC 1272/2008.		
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**	**221-453-2**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	sensitizing		
Evaluation/classification	Based on available data, the classification criteria are met.		
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**	**221-453-2**

Route of exposure	Skin
Species	mouse
Method	OECD 429
Source	ECHA
Evaluation	sensitizing

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

Type of examination	in vitro gene mutation study in bacteria
Species	Salmonella typhimurium / Escherichia coli
Method	OECD 472
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Route of exposure	oral
Type of examination	In vivo mammalian germ cells - chromosome effects
Species	mouse
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Route of exposure	oral
Type of examination	in vivo mammalian germ cell study: gene mutation
Species	rat
Method	OECD 488
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

Route of exposure	oral
Type of examination	Two-Generation Reproduction Toxicity Study
Species	rat
Method	OECD 416
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Route of exposure	oral
Type of examination	Prenatal Developmental Toxicity Study
Species	rabbit
Method	OECD 414
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

Route of exposure	oral
Type of examination	Toxicity study
Species	rat
Method	OECD 453
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**

Route of exposure	oral
Species	rat
Method	OECD 408
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Route of exposure	dermal
Species	mouse
Method	OECD 411
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Aspiration hazard
No data available

Endocrine disrupting properties

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)					
No	**Substance name**	**CAS no.**			**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**			**216-823-5**
LC50				1.5	mg/l
Duration of exposure				96	h
Species		Oncorhynchus mykiss			
Method		OECD 203			
Source		ECHA			
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**			**221-453-2**
LC50				7.5	mg/l
Duration of exposure				96	h
Species		Oncorhynchus mykiss			
Method		OECD 203			
Source		ECHA			

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)					
No	**Substance name**	**CAS no.**			**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**			**216-823-5**
EC50		1.1	-	2.8	mg/l
Duration of exposure				48	h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**			**221-453-2**
EC50		appr.		67.9	mg/l
Duration of exposure				48	h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			

Toxicity to Daphnia (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**
NOEC			0.3	mg/l
Duration of exposure			21	day(s)
Species		Daphnia magna		
Method		OECD 211		
Source		ECHA		

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**
EC50			9.1	mg/l
Duration of exposure			72	h
Species		Scenedesmus capricornutum		
Method		EPA-660/3-75-009		
Source		ECHA		
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**		**221-453-2**
EC50		appr.	9	mg/l

Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)
No data available

Bacteria toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**		**221-453-2**
IC50	>	1000		mg/l
Duration of exposure		3		h
Species	activated sludge			
Method	OECD 209			
Source	ECHA			

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**		**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**
Type	aerobic biodegradation			
Value		5		%
Duration		28		day(s)
Method	OECD 301 F			
Source	ECHA			
Evaluation	not readily degradable			
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**		**221-453-2**
Value		1.1		%
Duration		28		d
Method	OECD 301 D			
Source	ECHA			

Abiotic Degration				
No	**Substance name**	**CAS no.**		**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**		**216-823-5**
Type	Hydrolysis			
Half-life		86		h
pH value		7		
Reference temperature		25		°C
Method	OECD 111			
Source	ECHA			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)					
No	**Substance name**	**CAS no.**			**EC no.**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**			**216-823-5**
log Pow	2.64	-	3.78		
Reference temperature			25		°C
with reference to	pH 7				
Method	OECD 117				
Source	ECHA				
2	**p-tert-butylphenyl 1-(2,3-epoxy)propyl ether**	**3101-60-8**			**221-453-2**
log Pow			3.59		
Reference temperature			20		°C
Method	OECD 107				
Source	ECHA				

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
einzA Härter LawiPox, für Epoxidharz-Versiegelung RAL 7032	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not allow to enter drains or water courses.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste code	08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer. Empty containers must be scrapped or reconditioned.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN3082
IMDG	UN3082
ICAO-TI / IATA	UN3082

14.2 UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane
ICAO-TI / IATA	Environmentally hazardous substance, liquid, n.o.s.
Technical name	bis-[4-(2,3-epoxipropoxi)phenyl]propane

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	9
Label	9
Classification code	M6
Tunnel restriction code	-
Hazard identification no.	90
IMDG - Class	9
Label	9
ICAO-TI / IATA - Class	9
Label	9

14.4 Packing group

ADR/RID/ADN	III
IMDG	III
ICAO-TI / IATA	III

14.5 Environmental hazards

ADR/RID/ADN	Symbol "fish and tree"
IMDG	Symbol "fish and tree"
EmS	F-A, S-F
ICAO-TI / IATA	Symbol "fish and tree"

14.6 Special precautions for user
Transport within the user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**bis-[4-(2,3-epoxipropoxi)phenyl]propane**	**1675-54-3**	**216-823-5**	**75**
2	**oxirane, mono[(C12-14-alkyloxy)methyl] derivs.**	**68609-97-2**	**271-846-8**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2

National regulations

Other national regulations
Adhere to national regulations for proper handling and use of hazardous materials. Use appropriate personal protective equipment.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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