

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

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

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

- **1.1 Product identifier**
- **Trade name:** Epilox® T 19-38/700
- **Article number:** 0209
- **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** Epoxy binder
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
LEUNA-Harze GmbH
Am Haupttor, Bau 6619
D-06237 Leuna
Telefon 03461 43 3094
e-Mail: infomsds.harze@leuna.de
- **Further information obtainable from:**
Ansprechpartner:
Juliane Lößner
Telefon 03461 43 4654
Telefax 03461 43 4574
Telefon außerhalb der Geschäftszeit: 03461 43 6188
- **1.4 Emergency telephone number:**
Leitstelle Werkfeuerwehr
03461 434333

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

- **Signal word** Warning

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 1)

Hazard-determining components of labelling:*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 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***P261 Avoid breathing dust/fume/gas/mist/vapours/spray.**P273 Avoid release to the environment.**P280 Wear protective gloves / eye protection / face protection.**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.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***Additional information:***EUH205 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:** Resin mixture**Dangerous components:**

CAS: 1675-54-3 EINECS: 216-823-5 Reg.nr.: 01-2119456619-26-0006	<i>bis[4-(2,3-epoxypropoxy)phenyl]propane</i>	40 - < 60%
	 <i>Aquatic Chronic 2, H411</i>  <i>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</i>	
EC number: 701-263-0 Reg.nr.: 01-2119454392-40-0003	<i>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</i> Alternative CAS number: 9003-36-5	25 - < 50%
	 <i>Aquatic Chronic 2, H411</i>  <i>Skin Irrit. 2, H315; Skin Sens. 1, H317</i>	
CAS: 68609-97-2 EINECS: 271-846-8 Reg.nr.: 01-2119485289-22-0005	<i>oxirane, mono[(C12-14-alkyloxy)methyl] derivs</i>	10 - < 25%
	 <i>Skin Irrit. 2, H315; Skin Sens. 1, H317</i>	

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:** 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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 2)

- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **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** 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:** CO₂, powder or water spray. Fight larger fires with water spray.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
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).
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**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Keep container tightly sealed.
- **Storage class:** 10

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 3)

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· **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	Acute - systemic effects	0.5 mg/kg bw/day (general population)
Dermal	Long term - systemic effects	0.0893 mg/kg bw/day (general population) 0.75 mg/kg bw/day (worker)
Inhalative	Long term - systemic effects	0.87 mg/m ³ (general population) 4.93 mg/m ³ (worker)

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

Oral	Long term - systemic effects	6.25 mg/kg bw/day (general population)
Dermal	Long term - systemic effects	62.5 mg/kg bw/day (general population) 104.15 mg/kg bw/day (worker)
Inhalative	Long term - systemic effects	8.7 mg/m ³ (general population) 29.39 mg/m ³ (worker)

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

PNEC aqua	0.006 mg/L (fresh water) 0.001 mg/L (marine water)
PNEC sediment	0.341 mg/kg sediment (fresh water) 0.034 mg/kg sediment (marine water)
PNEC STP	10 mg/l (sewage)
PNEC soil	0.065 mg/kg soil dw (soil)
PNEC oral	11 mg/kg food (secondary poisoning)

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 aqua	0.025 mg/L (Intermittent releases) 0.003 mg/L (fresh water) 0 mg/L (marine water)
PNEC sediment	0.294 mg/kg sediment (fresh water) 0.029 mg/kg sediment (marine water)
PNEC STP	10 mg/l (sewage)
PNEC soil	0.237 mg/kg soil dw (soil)

· **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

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 4)

*Wash hands before breaks and at the end of work.**Avoid contact with the eyes and skin.*· **Respiratory protection:** *Use suitable respiratory protective device in case of insufficient ventilation.*· **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 application.**Butyl rubber, BR**Nitrile rubber, NBR**Recommended thickness of the material: ≥ 0.4 mm*· **Penetration time of glove material***For the mixture of chemicals mentioned below the penetration time has to be at least > 480 minutes (Permeation according to EN 16523-1:2015: Level 6).**The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*· **Eye protection:**

Tightly sealed goggles

· **Body protection:** *Protective work clothing*

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:***Fluid***Colour:***Light yellow*· **Odour:***Characteristic*· **Odour threshold:***Not determined.*· **pH-value:***Not determined.*· **Change in condition****Melting point/freezing point:***Undetermined.***Initial boiling point and boiling range:** *201 °C***Solidification point:***- 5 °C*· **Flash point:***140 °C*· **Flammability (solid, gas):***Not applicable.*· **Ignition temperature:** *> 200 °C*· **Decomposition temperature:***Not determined.*· **Auto-ignition temperature:***Product is not selfigniting.*

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 5)

· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	<2 hPa
· Density at 20 °C:	1.1295 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· aromatic hydrocarbons:	Not miscible or difficult to mix.
· organic solvents:	Soluble in many organic solvents.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· 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**
Exothermic polymerisation.
May produce violent reactions with bases and numerous organic substances including alcohols and amines.
- **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 toxicological effects**
- **Acute toxicity** 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)
Dermal	LD50	23,000 mg/kg (rabbit)

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

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 6)

- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, 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:**

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

LC50/96h 2 mg/l (Oncorhynchus mykiss)

EC50/48h 1.8 mg/l (daphnia magna)

EC50/72h 11 mg/l (algae)

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

LC50/96h 2.54 mg/l (fish)

EC50/48h 2.55 mg/l (daphnia magna)

EC50/72h 1.8 mg/l (algae)

- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is not easily biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Toxic for aquatic organisms
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.
- **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 be specially treated adhering to official regulations.
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

GB

(Contd. on page 8)

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

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 7)

SECTION 14: Transport information

· 14.1 UN-Number	UN3082
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	3082 UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (Epoxidharz)
· ADR	ENVIROMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide resin), MARINE POLLUTANT
· IMDG	ENVIROMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide resin)
· IATA	
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group	III
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: bis[4-(2,3-epoxypropoxy)phenyl]propane
· Marine pollutant:	Yes
· 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:	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	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

GB

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 6.1

Revision: 19.08.2020

Trade name: Epilox® T 19-38/700

(Contd. of page 8)

SECTION 15: Regulatory information

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

· TSCA (Toxic Substances Control Act):

1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	ACTIVE
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs	ACTIVE

· 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

· National regulations:

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

· **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.

· **Department issuing SDS:** Abteilung Qualitätssicherung

· **Contact:** Fr. Lößner

· 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)

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

vPvB: very Persistent and very Bioaccumulative

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

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

Skin Sens. 1: Skin sensitisation – Category 1

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

· *** Data compared to the previous version altered.**