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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

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

· **1.1 Product identifier**

· **Trade name: Epilox® L 50-54**

· **Article number:** 0301
· **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 resin

· **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 3639
e-Mail: infomsds.harze@leuna.de

· **Further information obtainable from:**
Abteilung Qualitätssicherung
Dr. Karin Bierögel
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**


GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.


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.
STOT SE 3 H335 May cause respiratory irritation.

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

(Contd. on page 2)

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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

Trade name: Epilox® L 50-54

(Contd. of page 1)

· ***Hazard pictograms***

GHS02 GHS07 GHS08

· ***Signal word*** *Warning*

· ***Hazard-determining components of labelling:***
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)
reaction mass of ethylbenzene and xylene

· ***Hazard statements***
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· ***Precautionary statements***

P210	*Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
P260	*Do not breathe dust/fume/gas/mist/vapours/spray.*
P280	*Wear protective gloves/protective clothing/eye protection/face protection.*
P303+P361+P353	*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
P304+P340	*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
P305+P351+P338	*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
P405	*Store locked up.*
P501	*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· ***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
Medium molecular Bisphenol-A-Epoxy resin

· ***Dangerous components:***

CAS: 25068-38-6 *Polymer*	*reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)* *Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317*	*50-100%*
EC number: 905-588-0 *Reg.nr.: 01-2119488216-32-XXXX*	*reaction mass of ethylbenzene and xylene* *Consisting of: 1330-20-7 xylene (≥80%); 100-41-4 ethylbenzene (<20%); 108-88-3 toluene (<0.5%)* *Flam. Liq. 3, H226* *STOT RE 2, H373; Asp. Tox. 1, H304* *Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335*	*10-25%*

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

(Contd. on page 3)

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

Printing date 28.01.2019 Version number 6 Revision: 28.01.2019

Trade name: Epilox® L 50-54

(Contd. of page 2)

*
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.
· **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.
Seek medical treatment.
· **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 or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
Hydrogen chloride (HCl)
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
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.
· **6.2 Environmental precautions:** 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.
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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

(Contd. on page 4)

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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

Trade name: Epilox® L 50-54

(Contd. of page 3)

· ***Information about fire - and explosion protection:***
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** *No special requirements.*
· ***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.
· ***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***

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)

Oral	*Acute - systemic effects*	*0.75 mg/kg bw/day (general population)*
	Long term - systemic effects	*0.75 mg/kg bw/day (general population)*
Dermal	*Acute - systemic effects*	*3.571 mg/kg bw/day (general population)*
		8.33 mg/kg bw/day (worker)
	Long term - systemic effects	*3.571 mg/kg bw/day (general population)*
		8.33 mg/kg bw/day (worker)
Inhalative	*Acute - systemic effects*	*12.25 mg/m³ (worker)*
	Long term - systemic effects	*12.25 mg/m³ (worker)*

reaction mass of ethylbenzene and xylene

Oral	*Long term - systemic effects*	*12.5 mg/kg bw/day (general population)*
Dermal	*Long term - systemic effects*	*125 mg/kg bw/day (general population)*
		212 mg/kg bw/day (worker)
Inhalative	*Long term - systemic effects*	*65.3 mg/m³ (general population)*
		221 mg/m³ (worker)

· ***PNECs***

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)

PNEC aqua	*0.018 mg/L (Intermittent releases)*
	0.006 mg/L (fresh water)
	0.0006 mg/L (marine water)
PNEC sediment	*0.996 mg/kg sediment (fresh water)*
	0.0996 mg/kg sediment (marine water)
PNEC STP	*10 mg/l (sewage)*
PNEC soil	*0.196 mg/kg soil dw (soil)*
PNEC oral	*11 mg/kg food (secondary poisoning)*

(Contd. on page 5)

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

(Contd. of page 4)

reaction mass of ethylbenzene and xylene	
PNEC aqua	0.327 mg/L (fresh water)
	0.327 mg/L (marine water)
PNEC sediment	12.46 mg/kg sediment (fresh water)
	12.46 mg/kg sediment (marine water)
PNEC STP	6.58 mg/l (sewage)
PNEC soil	2.31 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
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
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.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
Recommended thickness of the material: ≥ 0.4 mm
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
· **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 374 Part 3: Level 6).
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

· **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:**	Like aromatic solvents

(Contd. on page 6)

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

Printing date 28.01.2019 Version number 6 Revision: 28.01.2019

Trade name: Epilox® L 50-54

(Contd. of page 5)

· **Change in condition**	
Initial boiling point and boiling range:	137 °C
Solidification point:	-7 °C
· **Flash point:**	28 °C
· **Ignition temperature:**	482 °C
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· **Explosion limits:**	
Lower:	1.1 Vol %
Upper:	7.0 Vol %
· **Vapour pressure at 20 °C:**	6.7 hPa
· **Density at 20 °C:**	1.1 g/cm³
· **Solubility in / Miscibility with**	
water:	Not miscible or difficult to mix.
· **organic solvents:**	Soluble in many organic solvents.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic at 25 °C:	7 000 - 11 000 mPas
· **Solvent content:**	
Organic solvents:	25.0 %
Solids content:	75.0 %
· **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**
May produce violent reactions with bases and numerous organic substances including alcohols and amines.
Exothermic polymerisation.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

*

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:**		
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)		
Oral	LD50	15,000 mg/kg (Rat)
Dermal	LD50	23,000 mg/kg (rabbit)
reaction mass of ethylbenzene and xylene		
Oral	LD50	5,251 mg/kg (ratte, weiblich)

(Contd. on page 7)

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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

Trade name: Epilox® L 50-54

(Contd. of page 6)

		5,627 mg/kg (rat)
Dermal	*LD50*	*>4,200 mg/kg (rabbit)*
Inhalative	*LC50/4 h*	*27,571 mg/l (rat)*

· ***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.
· ***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***
May cause respiratory irritation.
· ***STOT-repeated exposure***
May cause damage to organs through prolonged or repeated exposure.
· ***Aspiration hazard*** *Based on available data, the classification criteria are not met.*

*
SECTION 12: Ecological information

· ***12.1 Toxicity***

· ***Aquatic toxicity:***	
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)	
LC50/96h	*2 mg/l (leuciscus idus)*
EC50/48h	*1.8 mg/l (Dap)*
EC50/72h	*11 mg/l (Alg)*

· ***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 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.

(Contd. on page 8)

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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

Trade name: Epilox® L 50-54

(Contd. of page 7)

SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN1866

· **14.2 UN proper shipping name**
· **ADR, IMDG, IATA** RESIN SOLUTION

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**

· **Class** 3 Flammable liquids.
· **Label** 3

· **14.4 Packing group**
· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**
· **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Flammable liquids.
· **Danger code (Kemler):** 30
· **EMS Number:** F-E,S-E

· **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
· **Transport category** 3
· **Tunnel restriction code** D/E

· **UN "Model Regulation":** UN1866, RESIN SOLUTION, 3, III

*

SECTION 15: Regulatory information

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

· **TSCA (Toxic Substances Control Act):**

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700-1100)

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** P5c FLAMMABLE LIQUIDS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
II	25.0

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

(Contd. on page 9)

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

Printing date 28.01.2019 *Version number 6* *Revision: 28.01.2019*

Trade name: Epilox® L 50-54

(Contd. of page 8)

· ***Other regulations, limitations and prohibitive regulations***
Reaktionsprodukt: Bisphenol-A-Epichlorhydrinharze mit durchschnittlichem Molekulargewicht 700-1100: other CAS-No. is 25036-25-3
· ***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***
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· ***Department issuing SDS:*** *Abteilung Qualitätssicherung*
· ***Contact:*** *Fr. Dr. Bierögel*
· ***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
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
· **** Data compared to the previous version altered.***

replaced version 2