

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

Printing date 12.11.2018

Version number 1

Revision: 12.11.2018

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

- **1.1 Product identifier**
- **Trade name:** Epilox-Härter M 1178
- **Article number:** 06149
- **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** Hardening agent/ Curing agent
- **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**



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

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



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
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.

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· Hazard pictograms

GHS05 GHS07 GHS09

· Signal word Danger**· Hazard-determining components of labelling:***m*-phenylenebis(methylamine)

trimethylhexane-1,6-diamine

phenol, styrenated

Polyetherdiamin

Phenol, methylstyrolisiert

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P260 Do not breathe dusts or mists.

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.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

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:** Epoxidharzhärter, Formulierung auf Basis aliphatischer Polyamine**· Dangerous components:**

CAS: 61788-44-1 EINECS: 262-975-0 Reg.nr.: 01-2119980970-27-0000	phenol, styrenated ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	25-50%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-xxxx	<i>m</i> -phenylenebis(methylamine) ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317 Aquatic Chronic 3, H412	10-<25%
CAS: 25513-64-8 EINECS: 247-063-2 Reg.nr.: 01-2119560598-25-xxxx	trimethylhexane-1,6-diamine ⚠ Skin Corr. 1A, H314 ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317 Aquatic Chronic 3, H412	10-<25%

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CAS: 9046-10-0 Reg.nr.: 01-2119557899-12-xxxx	Polyetherdiamin ⚠ Skin Corr. 1C, H314 Aquatic Chronic 3, H412	2.5-<10%
CAS: 68512-30-1 EINECS: 270-966-8 Reg.nr.: 01-2119555274-38-xxxx	Phenol, methylstyrolisiert ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317 Aquatic Chronic 3, H412	2.5-<10%
CAS: 69-72-7 EINECS: 200-712-3 Reg.nr.: 01-2119486984-17-xxxx	Salicylic acid ⚠ Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	2.5-<10%

Additional information:

For the wording of the listed hazard phrases refer to section 16.

EU-REACH regulation (EC 1907/2006):

"Phenol, methylstyrenated" (CAS-no. 68512-30-1) is registered as "Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol" [List Number (assigned manually to validated substances from inquiries by ECHA): 700-960-7]

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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:

Seek medical treatment.

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. Then consult a doctor.**After swallowing:**

Call for a doctor immediately.

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:**CO₂, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

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

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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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:

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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

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.

· Information about fire - and explosion protection: 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

9046-10-0 Polyetherdiamin

Dermal	Long term - systemic effects	2.5 mg/kg bw/day (worker)
Inhalative	Long term - systemic effects	1.36 mg/m ³ (worker)

· PNECs

9046-10-0 Polyetherdiamin

PNEC aqua	0.15 mg/L (Intermittent releases) 0.015 mg/L (fresh water) 0.0142 mg/L (marine water)
PNEC sediment	0.132 mg/kg sediment (fresh water) 0.125 mg/kg sediment (marine water)
PNEC STP	7.5 mg/l (sewage)
PNEC soil	0.0176 mg/kg soil dw (soil)

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PNEC oral	6.93 mg/kg food (secondary poisoning)
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· **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 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**

PVC 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.

· **Penetration time of glove material**

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:

Amber coloured

· **Odour:**

Amine-like

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

Melting point/freezing point:

Undetermined.

Initial boiling point and boiling range: 201 °C

· **Flash point:**

110 °C

· **Flammability (solid, gas):**

Not applicable.

· **Ignition temperature:**

230 °C

· **Decomposition temperature:**

Not determined.

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· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	0.0 Vol %
· Vapour pressure:	Not determined.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Partly miscible.
· aromatic hydrocarbons:	Not miscible or difficult to mix.
· organic solvents:	Soluble in many organic solvents.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· 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** Reacts 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:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

61788-44-1 phenol, styrenated

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

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

1477-55-0 m-phenylenebis(methylamine)

Oral LD50 930 mg/kg (rat)

Dermal LD50 >3,100 mg/kg (rabbit)

25513-64-8 trimethylhexane-1,6-diamine

Oral LD50 910 mg/kg (rat)

9046-10-0 Polyetherdiamin

Oral LD50 2,885 mg/kg (rat)

Dermal LD50 2,980 mg/kg (rabbit)

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

61788-44-1 phenol, styrenated

LC50/96h	14.8 mg/l (fish)
EC50/48h	1-10 mg/l (daphnia)
EC50/72h	3.14 mg/l (algae)

1477-55-0 m-phenylenebis(methylamine)

LC50/96h	87.6 mg/l (leuciscus idus)
EC50/48h	15.2 mg/l (daphnia)
EC50/72h	20.3 mg/l (algae)

25513-64-8 trimethylhexane-1,6-diamine

LC50/48h	174 mg/l (leuciscus idus)
EC50/24h	31.5 mg/l (daphnia)
EC50/72h	29.5 mg/l (algae)

9046-10-0 Polyetherdiamin

Inhalative	LC50/8h	>0.74 mg/l (rat)
	LC50/96h	>15 mg/l (leuciscus idus)
	EC50/48h	80 mg/l (daphnia)

- **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.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Also poisonous for fish and plankton in water bodies.

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.

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· **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.

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

· **Uncleaned packaging:**· **Recommendation:**

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

SECTION 14: Transport information

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

UN2735

· **14.2 UN proper shipping name**· **ADR**

2735 AMINE, FLÜSSIG, ÄTZEND, N.A.G. (m-phenylenebis(methylamine), Polyetherdiamin), UMWELTGEFÄHRDEND

· **IMDG**

AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine), Polyetherdiamin), MARINE POLLUTANT

· **IATA**

AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine), Polyetherdiamin)

· **14.3 Transport hazard class(es)**· **ADR, IMDG**· **Class**

8 Corrosive substances.

· **Label**

8

· **IATA**· **Class**

8 Corrosive substances.

· **Label**

8

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

II

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: Reaction products of m-phenylenebis(methylamine) and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

· **Marine pollutant:**

Yes

· **Special marking (ADR):**

Symbol (fish and tree)

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Corrosive substances.

· **Danger code (Kemler):**

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· EMS Number:	F-A,S-B
· Segregation groups	Alkalies
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine), Polyetherdiamin), 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· 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

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

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H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** *Abteilung Qualitätssicherung*

· **Contact:** *Fr. Dr. Bierögel*

· **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)

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

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

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

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

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