

SAFETY DATA SHEET

according to Regulation (EC) No. 830/2015

LECHSYS EPODUR HARDENER STANDARD

Version 3.21

Revision Date 15.04.2016

Print Date 12.01.2017

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

1.1 Product identifier

Trade name : LECHSYS EPODUR HARDENER STANDARD
Product code : L0290376

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

Use of the : Paints, varnishes and enamels
Substance/Mixture
Chemical nature : Compound for pigmented epoxy

1.3 Details of the supplier of the safety data sheet

Company : Lechler SpA
Via Cecilio 17
22100 Como- CO-
Telephone : +39031586111
Telefax : +39031586206
E-mail address : safety@lechler.eu
Responsible/issuing person

1.4 Emergency telephone number

Tel. +39-031-586301 Fax +39-031-586299
This telephone number is available during office hours only. (8.00-18.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1A	H314: Causes severe skin burns and eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms	:					
Signal word	:	Danger				
Hazard statements	:	H225	Highly flammable liquid and vapour.			
		H302	Harmful if swallowed.			
		H314	Causes severe skin burns and eye damage.			
		H317	May cause an allergic skin reaction.			
		H373	May cause damage to organs through prolonged or repeated exposure.			
		H411	Toxic to aquatic life with long lasting effects.			
Precautionary statements	:	Prevention:				
		P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.			
		P260	Do not breathe vapours.			
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.			
		Response:				
		P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.			
		P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.			
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
		P362 + P364	Take off contaminated clothing and wash it before reuse.			
		P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.			

Hazardous components which must be listed on the label:

- 1761-71-3 4,4'-methylenebis(cyclohexylamine)

2.3 Other hazards

None known.

No hazards resulting from the material as supplied.

The information required is contained in this Material Safety Data Sheet.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Liquid solution

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
benzyl alcohol	100-51-6 202-859-9 01-2119492630-38	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319	>= 30 - < 50
4,4'-methylenebis(cyclohexylamine)	1761-71-3 217-168-8 01-2119541673-38	Acute Tox. 4; H302 Skin Corr. 1B; H314 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Chronic 2; H411	>= 30 - < 50
xylene	1330-20-7 215-535-7 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315	>= 5 - < 10
butanone	78-93-3 201-159-0 01-2119457290-43	EUH066 Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 5 - < 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical advice.
Never give anything by mouth to an unconscious person.

If inhaled : Remove to fresh air.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.
If unconscious place in recovery position and seek medical advice.

In case of skin contact : Take off all contaminated clothing immediately.
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Do NOT use solvents or thinners.
Put shower on working place

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|------------------------|---|---|
| In case of eye contact | : | Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.
Seek medical advice.
Put eye-washer on working place
Remove contact lenses. |
| If swallowed | : | If accidentally swallowed obtain immediate medical attention.
Do NOT induce vomiting.
Keep at rest. |

4.2 Most important symptoms and effects, both acute and delayed

- | | | |
|----------|---|---------------------------|
| Symptoms | : | No information available. |
| Risks | : | No information available. |

4.3 Indication of any immediate medical attention and special treatment needed

- | | | |
|-----------|---|--|
| Treatment | : | The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.
Seek medical advice. |
|-----------|---|--|

SECTION 5: Firefighting measures

5.1 Extinguishing media

- | | | |
|--------------------------------|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Keep containers and surroundings cool with water spray. |
| Unsuitable extinguishing media | : | Do NOT use water jet. |

5.2 Special hazards arising from the substance or mixture

- | | | |
|--------------------------------------|---|---|
| Specific hazards during firefighting | : | As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.
Cool closed containers exposed to fire with water spray.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
|--------------------------------------|---|---|

5.3 Advice for firefighters

- | | | |
|---|---|--|
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |
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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Solvent vapours are heavier than air and may spread along floors.
Ensure adequate ventilation.
Use personal protective equipment.
Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Ventilate the area.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean with detergents. Avoid solvents.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Pick up and transfer to properly labelled containers.
Clean contaminated surface thoroughly.
Dam up.
Soak up with inert absorbent material and dispose of as hazardous waste.

6.4 Reference to other sections

Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding of the given occupational exposure limits (see section 8).
Use only in area provided with appropriate exhaust ventilation.
Avoid contact with skin, eyes and clothing.
Smoking, eating and drinking should be prohibited in the application area.
Avoid inhalation of vapour or mist.
For personal protection see section 8.
Thoroughly mix before using
After using, store in a well-sealed container

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Advice on protection against fire and explosion : Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
When transferring from one container to another apply earthing measures and use conductive hose material.
No sparking tools should be used.
The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Observe label precautions.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Solvent vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.
Electrical installations / working materials must comply with the technological safety standards.
Keep away from sources of ignition - No smoking.
Store between 5° and 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight.
Store in accordance with the particular national regulations.

Advice on common storage : Keep away from oxidising agents and strongly acid or alkaline materials.

7.3 Specific end use(s)

: This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
xylenes	1330-20-7	TWA	50 ppm 221 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			
		STEL	100 ppm 442 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			
butanone	78-93-3	TWA	200 ppm 600 mg/m ³	2000-06-16	2000/39/EC
Further information	:	Indicative			

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		STEL	300 ppm 900 mg/m ³	2000-06-16	2000/39/EC
Further information	:	Indicative			

DNEL

benzyl alcohol

: End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Short-term exposure

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term exposure

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Short-term exposure
Value: 110 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term exposure
Value: 22 mg/m³

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Short-term exposure
Value: 27 mg/m³

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term exposure
Value: 5,4 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Short-term exposure

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term exposure

PNEC

benzyl alcohol

: Soil
Value: 0,456 mg/kg

Marine sediment
Value: 0,527 mg/kg

Marine water

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Value: 0,1 mg/l

Fresh water sediment

Value: 5,27 mg/kg

Fresh water

Value: 1 mg/l

8.2 Exposure controls

Personal protective equipment

- Respiratory protection : Apply technical measures to comply with the occupational exposure limits.
This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.
Respirator with combination filter for vapour/particulate (EN 141).
- Hand protection : Solvent-resistant gloves (butyl-rubber)
For prolonged or repeated contact use protective gloves.
Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.
Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.
Skin should be washed after contact.
Wash your hands and put on barrier creams
- Eye protection : Chemical resistant goggles must be worn.
- Skin and body protection : Skin should be washed after contact.
Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire.
Personnel should wear protective clothing.
Workers should wear antistatic footwear.

Environmental exposure controls

- General advice : Try to prevent the material from entering drains or water courses.
If the product contaminates rivers and lakes or drains inform respective authorities.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Odour	: solvent-like
Flash point	: 0 - < 21 °C
Ignition temperature	: not determined
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Auto-ignition temperature	: not applicable
pH	: not determined
Freezing point	: not applicable
Boiling point	: not determined
Vapour pressure	: 1,000 hPa at 50 °C
Density	: 1,0087 g/cm ³
Water solubility	: not determined
Partition coefficient: n-octanol/water	: No data available
Solubility in other solvents	: not determined
Flow time	: 65 s 4 mm Method: ASTM D 1200 '82
Relative vapour density	: not applicable
Evaporation rate	: not determined

9.2 Other information

Solids by weight	: 54 %
Volatile organic compounds (VOC) content	: 46 %

SECTION 10: Stability and reactivity

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10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions.
Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Thermal decomposition : not applicable

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : Acute toxicity estimate: 1.016 mg/kg, Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l, 4 h, vapour, Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg, Calculation method

Skin corrosion/irritation : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin., The product may be absorbed through the skin.

Serious eye damage/eye irritation : The liquid splashed in the eyes may cause irritation and reversible damage.

Further information : The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Components:

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xylene :

Acute dermal toxicity : Acute toxicity estimate: 1.100 mg/kg, Converted acute toxicity point estimate

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish :
Remarks:
No data is available on the product itself.

Toxicity to fish
benzyl alcohol : LC50: 460 mg/l
Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

12.2 Persistence and degradability

Biodegradability : No data available

12.3 Bioaccumulative potential

Bioaccumulation : No data available

12.4 Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information : The product contains dangerous substances for the environment (see chapter no 3).
The concentration of each substance should be borne in mind

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in assessing the toxicological effects deriving from the preparation.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : The product should not be allowed to enter drains, water courses or the soil.
Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
The following Waste Codes are only suggestions: 150110*

SECTION 14: Transport information

14.1 UN number

- ADR : UN 3469
- IMDG : UN 3469
- IATA : UN 3469

14.2 Proper shipping name

- ADR PAINT RELATED MATERIAL, FLAMMABLE,
CORROSIVE
- IMDG PAINT RELATED MATERIAL,
FLAMMABLE,CORROSIVE
- IATA PAINT RELATED MATERIAL, FLAMMABLE,
CORROSIVE

14.3 Transport hazard class(es)

- ADR : 3 (8)
- IMDG : 3 (8)
- IATA : 3 (8)

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14.4 Packing group

ADR

Packing group : II
Classification Code : FC
Hazard Identification Number : 338
Labels : 3 (8)

IMDG

Packing group : II
Labels : 3 (8)
EmS Code : F-E,S-C

IATA

Packing group : II
Labels : 3 (8)

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA

Environmentally hazardous : no

14.6 Special precautions for user

not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High : not applicable

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Concern for Authorisation
(Article 59).

REACH - List of substances : not applicable
subject to authorisation
(Annex XIV)

MAL-Code-Number (DK) : 2-5 (1993)
474-m3 air/10 g

Risk classification according : Flash point less than 21 °C, at 15 °C not miscible in water
to VbF Specially dangerous flammable liquids

Water contaminating class : highly water endangering
(Germany) VVVWS A4

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical Safety Assessment

No data is available on the product itself.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless

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specified in the text.