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

Product identifier

Productname: 5-Minuten-Epoxy UV-beständig/Hardener Product code: LOS342-2

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

Use of the substance/mixture

Polymer preparations and compounds

Uses advised against

none/none

Details of the supplier of the safety data sheet

Company name:	Euro-Lock Vertriebs-GmbH	
Street:	Nordweststr. 3	
Place:	D - 59387 Ascheberg	
Telephone:	Tel.: +49(0)2593/95887-0	Fax: +49(0)2593/95887-29
Responsible Department:	Tel.: +49(0)2593/95887-0 E-Mail: info@euro-lock.de	

Emergency telephone: +49(0)2593/95887-0 Monday - Thursday from 8.00 a.m.-5.00 p.m. and Friday from 8.00 a.m.-1.00 p.m.

SECTION 2: Hazards identification

Classification of the substance or mixture

Indications of danger : Corrosive, Harmful
R-phrases:
Harmful by inhalation, in contact with skin and if swallowed.
Causes burns.
May cause sensitization by skin contact.

GHS classification

Hazard categories:
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Corr. 1B
Serious eye damage/eye irritation: Eye Dam. 1
Respiratory/skin sensitization: Skin Sens. 1
Hazard Statements:
Harmful if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Label elements

Signal word: Danger

Pictograms: GHS05-GHS07

Hazardous components which must be listed on the label

benzyl alcohol

Octahydro-4.7-methano-1H-indene-dimethanamine

Hazard statements

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P310	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.
P405	Store locked up.
P501	Dispose of contents/container to disposal according to official regulations .

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
202-859-9	benzyl alcohol	0 - 25 %
100-51-6	Xn R20/22	
603-057-00-5	Acute Tox. 4, Acute Tox. 4; H332 H302	
272-573-7	Octahydro-4.7-methano-1H-indene-dimethanamine	0 - 25 %
68889-71-4	C, Xn R21/22-34-43	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1; H312 H302 H314 H317	

Full text of R- and H-phrases: see section 16.

Further Information

Full text of R- and H-phrases: see section 16.
Product does not contain SVHC substances.

SECTION 4: First aid measures

Description of first aid measures

General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

After inhalation

Provide fresh air. Put victim at rest, cover with a blanket and keep warm.In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. in case of allergic symptoms especially in the breathing area, seek medical advice immediately.

After contact with skin

Remove contaminated clothing immediatley and dispose off safely. After contact with skin, wash immediately with plenty of water and soap. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Immediately call a POISON CENTER or doctor/physician. Let water be swallowed in little sips (dilution effect). Make affected person vomit if conscious.

Most important symptoms and effects, both acute and delayed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water spray. Foam. Carbon dioxide. Extinguishing powder.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special hazards arising from the substance or mixture

Can be released in case of fire: Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide (CO2).

Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation.
Wear personal protection equipment. (Refer to chapter 8.)

Environmental precautions

Do not empty into drains or the aquatic environment.
Dumping into the environment must be prevented.
In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

Methods and material for containment and cleaning up

Collect mechanically.
Treat the assimilated material according to the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.
Provide adequate ventilation.

Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (Refer to chapter 8.)
Provide for sufficient ventilation and punctiform suction at critical points.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

During spraying wear suitable respiratory equipment.!

Avoid contact with skin, eye and clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep locked up. Keep container tightly closed and in a well-ventilated place.

Advice on storage compatibility

Do not store together with: Explosives. Peroxides. Radioactive substances. Infectious substances. Oxidizing solids. Oxidizing liquids. Food and fodder.

Further information on storage conditions

Store small quantities in appropriate dangerous substance cabinets. Protect against: Light. UV-radiation/sunlight. heat. cooling moisture.

SECTION 8: Exposure controls/personal protection

Control parameters

Additional advice on limit values

To date, no national limit values exist.

Exposure controls

Occupational exposure controls

In case of open handling, use devices with built-in suction where possible. If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured.
During spraying wear suitable respiratory equipment.!

Protective and hygiene measures

Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. Remove contaminated clothing immediately and dispose off safely. Wash contaminated clothing prior to re-use. Used working clothes should not be used outside the work area. Street clothing should be stored separately from work clothing.

Respiratory protection

Respiratory protection required in case of:
insufficient ventilation.
Generation/formation of aerosols
Generation/formation of mist
Suitable respiratory protective equipment:
Combination filter device (DIN EN 141).. Type: A-P2/P3

Hand protection

Pull-over gloves of rubber. DIN EN 374
NBR (Nitrile rubber). (0,5 mm)
FKM (fluororubber). (0,5 mm)
Before using check leak tightness / impermeability. In case of reutilization, clean gloves before taking off and store in well-aired place.

Eye protection

Suitable eye protection: Tightly sealed safety glasses. DIN EN 166

Skin protection

Lab apron.

Environmental exposure controls

This material and its container must be disposed of in a safe way.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	amines.

		Test method
pH-Value (at 20 °C):	not determined	
Changes in the physical state		
Melting point:	not determined	
Boiling point:	>200 °C	
Flash point:	>100 °C	
Explosive properties		
not explosive.		
Lower explosion limits:	1,3 vol. %	
Upper explosion limits:	13,0 vol. %	
Ignition temperature:	305 °C	
Oxidizing properties		
none/none		
Vapour pressure: (at 20 °C)	0,1 hPa	
Density (at 23 °C):	1,0 g/cm³	ISO 2811
Water solubility:	not miscible	
Viscosity / dynamic (at 23 °C):	6000 mPa·s	ISO 3219

SECTION 10: Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under normal storage and handling conditions.

Possibility of hazardous reactions

Reacts with : Oxidizing agents, strong.

Conditions to avoid

Thermal decomposition can lead to the escape of irritating gases and vapours.

Incompatible materials

Reacts with : Oxidizing agents, strong.

Hazardous decomposition products

Can be released in case of fire: Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

CAS No.	Chemical name					
	Exposure routes	Method	Dose	Species	h	Source
100-51-6	benzyl alcohol					
	Acute oral toxicity	LD50	1230 mg/kg	Rat.		ECHA dossier
	Acute inhalation toxicity	ATE	11 mg/l			
68889-71-4	Octahydro-4.7-methano-1H-indene-dimethanamine					
	Acute oral toxicity	LD50	503 mg/kg	Rat.		
	Acute dermal toxicity	LD50 mg/kg	400 -500	Rat.		

Irritation and corrosivity

Irritant effect on the eye: corrosive.
Irritant effect on the skin: corrosive.
Danger of severe chemical burns that lead to perforation of oesophagus and stomach.

Sensitizing effects

Respiratory or skin sensitisation:
People who suffer from skins problems, asthma, allergies, chronic or recurring respiratory illnesses must not be deployed in processes, which use this substance.

benzyl alcohol:
WoE NESIL = 59000 µg/cm2

Severe effects after repeated or prolonged exposure

benzyl alcohol:
Subacute inhalative toxicity (Rat.) (28d) OECD Guideline 412 = 1072 mg/m3

Carcinogenic/mutagenic/toxic effects for reproduction

benzyl alcohol:
No evidence for: Carcinogenicity
No experimental indications of mutagenicity in-vitro exist.

SECTION 12: Ecological information

Toxicity

CAS No.	Chemical name					
	Aquatic toxicity	Method	Dose	Species	h	Source
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50	460 mg/l	Pimephales promelas	96	ECHA dossier
	Acute algae toxicity	ErC50	500 mg/l	Pseudokirchnella subcpitata	72	ECHA dossier
	Acute crustacea toxicity	EC50	230 mg/l	Daphnia magna	48	ECHA dossier
68889-71-4	Octahydro-4.7-methano-1H-indene-dimethanamine					
	Acute fish toxicity	LC50	110 mg/l	Salmo gairdneri	96	

Persistence and degradability

benzyl alcohol:
OECD 301A / ISO 7827 / EEC 92/69 annex V, C.4-A: > 90% (21d)
Easily biodegradable (concerning to the criteria of the OECD)

Bioaccumulative potential

No indication of bio-accumulation potential.

Partition coefficient n-octanol/water

CAS No.	Chemical name	Log Pow
100-51-6	benzyl alcohol	1,05

Mobility in soil

No information available.

Results of PBT and vPvB assessment

No information available.

Further information

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Advice on disposal

Waste disposal according to official state regulations. Consult the local waste disposal expert about waste disposal. Moreover, national legislation has to be observed!

Waste disposal number of waste from residues/unused products

080499 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); wastes not otherwise specified

Waste disposal number of used product

080499 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); wastes not otherwise specified

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Cleaned containers may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

UN number: UN2735

UN proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (TRICYCLODECANDIMETHANAMINE)

Transport hazard class(es): 8

Packing group: III

Hazard label: 8

Classification code: C7
Special Provisions: 274
Limited quantity: 5 L

Transport category:	2
Hazard-no.:	80
Tunnel restriction code:	E

Other applicable information (land transport)

Excepted quantity: E2

Inland waterways transport

UN number:	UN2735
UN proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (TRICYCLODECANDIMETHANAMINE)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8

Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L

Other applicable information (inland waterways transport)

Excepted quantity: E2

Marine transport

UN number:	UN2735
UN proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (TRICYCLODECANDIMETHANAMINE)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8

Special Provisions:	274
Limited quantity:	5 L
EmS:	F-A, S-B

Other applicable information (marine transport)

Excepted quantity: E2 (Tricyclodecandimethanamine)

Air transport

UN/ID number:	UN2735
UN proper shipping name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (TRICYCLODECANDIMETHANAMINE)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8

Special Provisions:	A3

Limited quantity Passenger:	0.5 L	
IATA-packing instructions - Passenger:		851
IATA-max. quantity - Passenger:		1 L
IATA-packing instructions - Cargo:		855
IATA-max. quantity - Cargo:		30 L

Other applicable information (air transport)

Excepted quantity: E2
Passenger-LQ: Y840

Environmental hazards

Dangerous for the environment: no

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions:	Observe employment restrictions for young people.
Water contaminating class (D):	1 - slightly water contaminating

SECTION 16: Other information

Changes

08.01.2016 Rev. 1,00 Initial release

Full text of R-phrases referred to under sections 2 and 3

20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
20/22	Harmful by inhalation and if swallowed.
21/22	Harmful in contact with skin and if swallowed.
34	Causes burns.
43	May cause sensitization by skin contact.

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

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)