

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Print date: 11.01.2016

Flüssigmetall LOS 365-A

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

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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:	+49 (0)2593 95887-0	Telefax: +49 (0)2593 95887-29
Responsible Department:	info@euro-lock.de	
	+49 (0)2593 95887-0	

Emergency telephone: +49 (0)2593 95887-0 Monday - Thursday 8:00 - 17:00 CET, Friday 8:00 - 13:00 CET**SECTION 2: Hazards identification****Classification of the substance or mixture**

Indications of danger : Irritant, Dangerous for the environment

R-phrases:

Irritating to eyes and skin.

May cause sensitization by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS classification

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory/skin sensitization: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

Label elements

Signal word:	Warning
Pictograms:	GHS07-GHS09

**Hazardous components which must be listed on the label**epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)
Bisphenol-F-epoxy resin

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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

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/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.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container to disposal according to official regulations .

Special labelling of certain mixtures

- EUH205 Contains epoxy constituents. May produce an allergic reaction.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
500-033-5	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)	< 50 %
25068-38-6	Xi, N R36/38-43-51-53	
603-074-00-8	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H315 H317 H411	
	Trimethylolpropane triglycidyl ether	< 1 %
30499-70-8	Xi R36/38-43-52-53	
	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H319 H315 H317 H412	
	Bisphenol-F-epoxy resin	< 10 %
55492-52-9	Xi, N R36/38-43-51-53	
	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H315 H317 H411	
271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	< 1 %
68609-97-2	Xi R38-43	
603-103-00-4	Skin Irrit. 2, Skin Sens. 1; H315 H317	

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

Further Information

Note: This hazard characteristics refer to the properties of pure ingredients, for the identification of the preparation (product), see Section 2 and 16.
 Product does not contain SVHC substances.

SECTION 4: First aid measures

Description of first aid measures

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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

Take off immediately all contaminated clothing. After contact with skin, wash immediately with: Water. In case of skin irritation, seek medical treatment.

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. Make affected person vomit if conscious. Never give anything by mouth to an unconscious person or a person with cramps. Immediately get medical attention.

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: Carbon monoxide. Carbon dioxide (CO₂). hydrochloric gas.

Advice for firefighters

Fire class: B

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. Extinguishing materials should be selected according to the surrounding area. Use water spray/stream to protect personnel and to cool endangered containers.

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

Dumping into the environment must be prevented.

Methods and material for containment and cleaning up

Collect mechanically.

Treat the assimilated material according to the section on waste disposal.

Clear contaminated area thoroughly. Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

See protective measures under point 7 and 8.

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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

Avoid contact with skin, eye and clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Oxidizing solids. Oxidizing liquids. Explosives. Food and fodder

Further information on storage conditions

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.
Other information: DNEL - worker = 8,3 mg/kg

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.

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:
Generation/formation of dust
Suitable respiratory protective equipment:
Combination filter device (DIN EN 141).. Type: A-P2/P3

Hand protection

Pull-over gloves of rubber. DIN EN 374
Suitable material:
NBR (Nitrile rubber). (> 0,5 mm)
FKM (fluororubber). (> 0,5 mm)
PVC (Polyvinyl chloride). (0,5 mm)
Before using check leak tightness / impermeability. In case of reutilization, clean gloves before taking

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off and store in well-aired place.

Eye protection

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

Skin protection

Suitable protection of the body: 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:	black
Odour:	characteristic

Test method**Changes in the physical state**

Melting point:	not determined
Boiling point:	>200 °C
Flash point:	>100 °C

Explosive properties

none/none

Density (at 20 °C): ca. 1,3 g/cm³

Water solubility: not miscible

Viscosity / dynamic:
(at 25 °C) High viscos IS**SECTION 10: Stability and reactivity****Reactivity**

No information available.

Chemical stability

Stable under normal storage and handling conditions.

Possibility of hazardous reactions

No information available.

Conditions to avoid

Keep away from heat.

Incompatible materials

Materials to avoid: Oxidizing agents, strong. Strong acid. amines. Alkalis (alkalis), concentrated.

Hazardous decomposition productsCan be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Hydrogen chloride (HCl).**SECTION 11: Toxicological information****Information on toxicological effects**

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Acute toxicity

CAS No.	Chemical name					
	Exposure routes	Method	Dose	Species	h	Source
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)					
	Acute oral toxicity	LD50	>2000 mg/kg	Rat.		ECHA dossier
	Acute dermal toxicity	LD50	>2000 mg/kg	Rat.		ECHA dossier
55492-52-9	Bisphenol-F-epoxy resin					
	Acute oral toxicity	LD50	>5000 mg/kg	Rat.		
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.					
	Acute oral toxicity	LD50	5000 mg/kg	Rat.		

Irritation and corrosivity

Irritant effect on the eye: irritant.
Irritant effect on the skin: irritant.

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.

Severe effects after repeated or prolonged exposure

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin):
Subchronic dermal toxicity: NOAEL = 10 mg/kg (90d) Rat.
Subchronic oral toxicity: NOAEL = 50 mg/kg (90d) Rat.

Carcinogenic/mutagenic/toxic effects for reproduction

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin):
There is Evidence for: In-vitro mutagenicity; No evidence for: Carcinogenicity
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.:
There is Evidence for: In-vitro mutagenicity

SECTION 12: Ecological information

Toxicity

CAS No.	Chemical name					
	Aquatic toxicity	Method	Dose	Species	h	Source
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)					
	Acute fish toxicity	LC50	3,6 mg/l	Leuciscus idus	96	
	Acute algae toxicity	ErC50	220 mg/l	Alge Scenedesmus sp.)	96	
	Acute crustacea toxicity	EC50	2,8 mg/l	Daphnia magna	48	
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.					
	Acute fish toxicity	LC50	1-10 mg/l		96	
	Acute crustacea toxicity	EC50	1-10 mg/l	Daphnia magna	48	

Persistence and degradability

Some of the components are biologically degradable with difficulty.
epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin):
5%/ 28d OECD Guideline 301 F
Some of the components are biodegradable.
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.:
87%/ 28d OECD Guideline 301 F

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Bioaccumulative potential

epoxy resin (number average molecular weight \leq 700), reaction product: bisphenol-A-(epichlorhydrin):
BCF 31 (calc.)
Bioaccumulation is not anticipated since this material is hydrolytically unstable.

Partition coefficient n-octanol/water

CAS No.	Chemical name	Log Pow
25068-38-6	epoxy resin (number average molecular weight \leq 700), reaction product: bisphenol-A-(epichlorhydrin)	3,26
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3,77

Further information

epoxy resin (number average molecular weight \leq 700), reaction product: bisphenol-A-(epichlorhydrin):
hydrolyzed 82% (28d)

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

200127 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); paint, inks, adhesives and resins containing dangerous substances
Classified as hazardous waste.

Waste disposal number of used product

200127 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); paint, inks, adhesives and resins containing dangerous substances
Classified as hazardous waste.

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: 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains: epoxy resin)
Transport hazard class(es): 9
Packing group: III
Hazard label: 9



Classification code: M6

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Special Provisions: 274 335 601
Limited quantity: 5 L
Transport category: 3
Hazard-no.: 90
Tunnel restriction code: E

Other applicable information (land transport)

Excepted quantity: E1

Inland waterways transport

UN number: 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains: epoxy resin)
Transport hazard class(es): 9
Packing group: III
Hazard label: 9



Classification code: M6
Special Provisions: 274 335 601
Limited quantity: 5 L

Other applicable information (inland waterways transport)

Excepted quantity: E1

Marine transport

UN number: 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains epoxy resin)
Transport hazard class(es): 9
Packing group: III
Hazard label: 9



Special Provisions: 274, 335
Limited quantity: 5 L
EmS: F-A, S-F

Other applicable information (marine transport)

Excepted quantity: E1

Air transport

UN/ID number: 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains epoxy resin)
Transport hazard class(es): 9
Packing group: III
Hazard label: 9

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Special Provisions: A97 A158
 Limited quantity Passenger: 30 kg G
 IATA-packing instructions - Passenger: 964
 IATA-max. quantity - Passenger: 450 L
 IATA-packing instructions - Cargo: 964
 IATA-max. quantity - Cargo: 450 L

Other applicable information (air transport)

Excepted quantity: E1
 Passenger-LQ: Y964

Environmental hazards

Dangerous for the environment / Marine pollutant: yes

**SECTION 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

1999/13/EC (VOC): 0% (Data concerning the Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL))

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing. Observe employment restrictions for women of child-bearing age.

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information**Changes**

Rev 1,00 Initial release 11.01.2016

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

36/38 Irritating to eyes and skin.
 38 Irritating to skin.
 43 May cause sensitization by skin contact.
 51 Toxic to aquatic organisms.
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 52 Harmful to aquatic organisms.
 53 May cause long-term adverse effects in the aquatic environment.

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

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.
 H412 Harmful to aquatic life with long lasting effects.

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

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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.)