

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

- Product identifier
- Trade name **LasilCast 1, 2, 5, 6, 8, 10, 12 component A**
- Utilization of the substance of the formulation: Polyol for Polyurethanes
- Relevant identified uses of the substance or mixture and uses advised against
- Sector of Use SU12 Manufacture of plastics products, including compounding and conversion
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
ALTROPOL KUNSTSTOFF GmbH
Rudolf-Diesel-Str 9 - 13
D-23617 Stockelsdorf
Tel. +49 (0)451-49960-0
Fax. +49 (0)451-49960-20 e-mail:
info@altropol.de
- Further information obtainable from: environment protection department
- Emergency telephone number:
During normal opening times (7 am - 5 pm)
phone : +49 (0)451-49960-0 or +49 (0)176-10232577

* 2 Hazards

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.

- Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- Label elements

- Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
· Code letter and hazard designation of product:



Xi Irritant

- Risk phrases:
36 Irritating to eyes.
- Safety phrases:
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
60 This material and its container must be disposed of as hazardous waste.

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- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 102-60-3 EINECS: 203-041-4	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol ☒ Xi R36 ☠ Eye Irrit. 2, H319	25 - 50%
CAS: 25322-69-4	Polypropylenglykol ☒ Xn R22 ☠ Acute Tox. 4, H302	10 - 25%
CAS: 38640-62-9	alkylated aromatic hydrocarbon R53 ☠ Asp. Tox. 1, H304; Aquatic Chronic 4, H413	10 - 25%
CAS: 124-17-4 EINECS: 204-685-9	2-(2-butoxyethoxy)ethyl acetate substance with a Community workplace exposure limit	5 - 10%
CAS: 64742-82-1	Naphtha (petroleum), hydrotreated heavy; naphtha, low boiling point.) ☒ Xn R65; ☠ NR51/53 R10 ☠ Flam. Liq. 3, H226; ☠ Asp. Tox. 1, H304; ☠ Aquatic Chronic 2, H411	0.5- 2.5%

- Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing:
 - A person vomiting while laying on their back should be turned onto their side.
 - Seek immediate medical advice.
- Information for doctor:
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
 - No further relevant information available.

5 Firefighting measures

- 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
- Special hazards arising from the substance or mixture
 - In case of fire, the following can be released:
 - Carbon monoxide (CO)

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- carbon dioxide
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.
- Additional information
 - Cool endangered receptacles with water spray.
 - Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 - Wear protective equipment. Keep unprotected persons away.
 - Keep away from ignition sources.
 - Ensure adequate ventilation
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections
 - See Section 13 for disposal information.
 - No dangerous substances are released.

7 Handling and storage

- Handling:
 - Precautions for safe handling
 - Open and handle receptacle with care.
 - Ensure good ventilation/exhaustion at the workplace.
 - Information about fire - and explosion protection:
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
- Conditions for safe storage, including any incompatibilities
- Storage:
 - Requirements to be met by storerooms and receptacles:
 - Keep container tightly closed and dry and storage in a good ventilated room.
 - Storage temperature: 15 - 25 °C.
 - Information about storage in one common storage facility:
 - Do not store together with oxidizing and acidic materials.
 - Store away from foodstuffs.
 - Further information about storage conditions:
 - Protect from humidity and water.
 - Store in dry conditions.
 - Protect from frost.
 - Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Control parameters

· Ingredients with limit values that require monitoring at the workplace:

124-17-4 2-(2-butoxyethoxy)ethyl acetate
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AGW (Germany)	Long-term value: 67 mg/m ³ , 10 ppm 1.5(I);DFG, Y
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· DNELs		
38640-62-9 alkylated aromatic hydrocarbon		
Oral	DNEL	2.1 mg/kg/d (General population)
Dermal	DNEL	2.1 mg/kg/d (General population) 4.3 mg/kg/d (workers)
Inhalative	DNEL	7.4 mg/m ³ (General population) 30 mg/m ³ (workers)
· PNECs		
38640-62-9 alkylated aromatic hydrocarbon		
PNEC		25 mg/kg (-)
PNEC STP		0.15 mg/L (-)
PNEC aqua		0.26 ug/L (freshwater)
		0.026 ug/L (marine water)
PNEC sediment		0.94 mg/kg (freshwater)
		0.094 mg/kg (marine water)
PNEC soil		0.19 mg/kg (-)

· Additional information: The lists valid during the making were used as basis.

· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

· Respiratory protection: Not necessary if room is well-ventilated.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of 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.

· For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Natural rubber, NR

· Eye protection: Goggles recommended during refilling

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

Fluid

Colour:

According to product specification

· Odour:

Characteristic

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· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	> 100°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C:	ca. 0.95 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Viscosity:	
Dynamic at 25°C:	ca. 35 mPas
VOC (EC)	8.43 %
· Other information	No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: water , alcohol , amine , base and acid
- Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

· LD/LC50 values relevant for classification:

102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol

Oral	LD50	2050 mg/kg (Ratte)
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25322-69-4 Polypropylenglykol

Oral	LD50	1000 - < 2000 mg/kg (Ratte)
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Dermal	LD50	>10000 mg/kg (Kaninchen)
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38640-62-9 alkylated aromatic hydrocarbon

Oral	LD50	4000 mg/kg (Ratte) (OECD 401)
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	NOAEL	170 mg/kg (Ratte)
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Dermal	LD50	4050 mg/kg (Ratte) (OECD 402)
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Inhalative	LC50/4 h	5.8 mg/l (Ratte) (OECD 403)
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- Primary irritant effect:
 - on the skin: slightly irritant (OECD method), labelling not required
 - on the eye:
 - slightly irritant, labelling not required (analogy conclusion)
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

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When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

· Toxicity

· Aquatic toxicity:

102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol

EC50 (48 h) >100 mg/l (Daphnia Magna)

EC50 (72 h) 150.67 mg/l (A)

LC50 (96 h) >2000 mg/l (F)

25322-69-4 Polypropylenglykol

EC50 (48 h) >100 mg/l (Daphnia Magna)

38640-62-9 alkylated aromatic hydrocarbon

EC0 (48h) 0.16 mg/l (Daphnia Magna) (OECD 202)

EC0 (72h) 0.15 mg/l (A) (OECD 201)

LC0(96h) 0.5 mg/l (F) (OECD 203)

NOEC (21d) 0.013 µg/l (Daphnia Magna) (OECD 202)

· Persistence and degradability No further relevant information available.

· Behaviour in environmental systems:

· Bioaccumulative potential No further relevant information available.

· Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation

After prior treatment product has to be landfilled adhering to the regulations pertaining to the disposal of particularly hazardous waste.

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

· European waste catalogue

07 02 13 waste plastic

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number

· ADR, ADN

· IMDG, IATA

Void

UN3082

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· UN proper shipping name · ADR, ADN · IMDG	Void ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
· Transport hazard class(es) · ADR, ADN · Class	Void
· IMDG, IATA 	
· Class · Label	9 Miscellaneous dangerous substances and articles. 9
· Packing group · ADR · IMDG, IATA	Void III
· Environmental hazards: · Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user · EMS Number:	Not applicable. F-A,S-F
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- Code letter and hazard designation of product:



Xi Irritant

- Risk phrases:
36 Irritating to eyes.
- Safety phrases:
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
60 This material and its container must be disposed of as hazardous waste.

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- National regulations:
- Technical instructions (air):

Class	Share in %
NK	5 - 10

- Waterhazard class: Water hazard class 1 (VwVwS 17.05.99): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.
 - H302 Harmful if swallowed.
 - H304 May be fatal if swallowed and enters airways.
 - H319 Causes serious eye irritation.
 - H411 Toxic to aquatic life with long lasting effects.
 - H413 May cause long lasting harmful effects to aquatic life.
- R10 Flammable.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R53 May cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- Department issuing MSDS: environment protection department
- Contact:
 - Herr Karasmann Tel. +49 (0)451-49960-0
 - Herr Grützmacher Tel. +49 (0)2056-25863-6
- 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 Organization
 - 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 Harmonized System of Classification and Labelling of Chemicals
 - VOC: Volatile Organic Compounds (USA, EU)
 - DNEL: Derived No-Effect Level (REACH)
 - PNEC: Predicted No-Effect Concentration (REACH)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- * Data compared to the previous version altered.