

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

- **1.1 Product identifier**
- **Creation date version 1** 11.04.2013
- **Trade name** **EuroCast 4 Part A**
- **Article number:** P1941
- **Utilization of the substance of the formulation:** Polyol for Polyurethanes
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Europol  
· 9 Birchills Trading Estate  
· Emery Road  
· Brislington  
· Bristol BS4 5PF  
· www.europoluk.com sales@europoluk.com  
· Further information obtainable from: environment protection department
- **1.4 Emergency telephone number:**  
During normal opening times (9am-5pm)  
· phone : +44 (0) 117 971 5500

**SECTION 2: Hazards identification**

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



Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **UFI: HCGF-DFH9-4004-W1EG**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.  
P280 Wear 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.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Trade name EuroCast 4 Part A**

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### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 25214-63-5 NLP: 500-035-6 Reg.nr.: 01-2119471485-32-xxxx	Alkylaminopolyoxyalkylenol ----- ⚠ Eye Irrit. 2, H319	≥10-<50%
CAS: 25322-69-4 Reg.nr.: 01-2119457556-29-xxxx	Polypropylenglykol ----- ⚠ Acute Tox. 4, H302	10-25%
CAS: 28553-12-0 EINECS: 249-079-5 Reg.nr.: 01-2119430798-28-xxxx	di-"isononyl" phthalate substance with a Community workplace exposure limit	10-25%

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

### SECTION 4: First aid measures

- **4.1 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.  
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
If swallowed, rinse mouth with water (only if the person is conscious).  
A person vomiting while laying on their back should be turned onto their side.
- **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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:**  
Water  
Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Carbon monoxide (CO)  
carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
cover accouterment bear , exposed person remove  
Wear protective clothing.

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**Trade name EuroCast 4 Part A**

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- **6.2 Environmental precautions:**  
Prevent seepage into sewage system, workpits and cellars.  
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).
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 7 for information on safe handling.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Store in cool, dry place in tightly closed receptacles.  
Keep away from heat and direct sunlight.  
Take care by opening  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 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: 20 - 25 °C.
- **Information about storage in one common storage facility:**  
Store away from flammable substances.  
Store away from oxidising agents.  
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.  
Store away from foodstuffs.
- **Further information about storage conditions:**  
Protect from frost.  
Store in dry conditions.  
Protect from humidity and water.  
Keep container tightly sealed.
- **Storage class: 10**
- **7.3 Denomination of Origin Made in Germany**
- **Processing information** Homogenize content before use
- **General remark** For processing instructions see data sheet

### SECTION 8: Exposure controls/personal protection

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

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

28553-12-0 di-"isononyl" phthalate

 WEL (Great Britain) Long-term value: 5 mg/m<sup>3</sup>
**DNELs**

25214-63-5 Alkylaminopolyoxyalkylenol

Oral	DNEL systemic effects - long term exposure	8.3 mg/kg bw/d (General population)
Dermal	DNEL systemic effects - long term exposure	8.3 mg/kg bw/d (General population) 13.9 mg/kg bw/d (workers)

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**Trade name EuroCast 4 Part A**

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Inhalative	DNEL systemic effects - long term exposure	29 mg/m <sup>3</sup> (General population) 98 mg/m <sup>3</sup> (workers)
<b>28553-12-0 di-"isononyl" phthalate</b>		
Oral	DNEL Long-term - systemic effects	4.4 mg/kg bw/day (General population)
	DNEL Chronic - systemic effects	4.4 mg/kg bw/d (workers)
Dermal	DNEL Long-term - systemic effects	220 mg/kg bw/day (General population) 366 mg/kg bw/day (workers)
	DNEL chronic - systemic effects	220 mg/kg bw/d (General population) 366 mg/kg bw/d (workers)
Inhalative	DNEL Long-term - systemic effects	15.3 mg/m <sup>3</sup> (General population)
	DNEL systemic effects - short term	51.72 mg/m <sup>3</sup> (workers)
	DNEL chronic - systemic effects	15.3 mg/m <sup>3</sup> (General population) 51.72 mg/m <sup>3</sup> (workers)

**· PNECs**
**25214-63-5 Alkylaminopolyoxyalkylenol**

PNEC	0.193 mg/kg (freshwater- sediment)
	0.0193 mg/kg (seawater - sediment)
	0.0183 mg/kg (soil ( Boden))
PNEC	0.085 mg/l (freshwater)
	0.0085 mg/l (marine water)
	1.51 mg/l (intermittent releases)

**28553-12-0 di-"isononyl" phthalate**

PNEC soil	30 mg/kg (soil ( Boden))
PNEC Secondary poisoning	150 mg/kg (food)

· **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.
- Avoid contact with the eyes and skin.

**· Respiratory protection:**

Short term filter device:



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

**· Protection of hands:**

Preventive skin protection (3-point program) required



Protective gloves

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

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**Trade name EuroCast 4 Part A**

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**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 gloves made of the following materials are suitable:**

Butyl rubber, BR  
 Nitrile rubber, NBR

**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:	Whitish
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.

**Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	175 °C

Flash point: 95 °C

Flammability (solid, gas): Not applicable.

Ignition temperature: 265 °C

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

**Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not determined.

Density at 20 °C: 0.95 g/cm<sup>3</sup>

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

**Solubility in / Miscibility with water:**

Insoluble.

Partition coefficient: n-octanol/water: Not determined.

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**Trade name EuroCast 4 Part A**

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- **Viscosity:**
  - Dynamic at 20 °C:** 75 mPas
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** 0.0 %
  - VOC (EC)** 0.3 g/l
- **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, alkalis and oxidising agents.
- **10.4 Conditions to avoid**  
Moisture. Heat, open flames and other ignition sources. With contaminated pipes and tanks or corroded or rusty containers may lead to increased formation of hydrogen. Detail in section 7.
- **10.5 Incompatible materials:** Incompatible with oxidizing agents, acids
- **10.6 Hazardous decomposition products:** if handled accordingly no products of decomposition.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

**LD/LC50 values relevant for classification:**
**25214-63-5 Alkylaminopolyoxyalkylenol**

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

**85586-25-0 Fettsäuremethylester**

Oral	LD50	>2,000 mg/kg (rat)
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**25322-69-4 Polypropylenglykol**

Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)

**28553-12-0 di-"isononyl" phthalate**

Oral	LD50	>10,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>3,160 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** irritation feasible
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **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.

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**Trade name EuroCast 4 Part A**

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## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · Aquatic toxicity:

##### 25214-63-5 Alkylaminopolyoxyalkylenol

LC50 (96 h)	4,600 mg/l ( <i>Leuciscus</i> )
EC50 (72 h)	150.67 mg/l ( <i>Desmodesmus subspicatus</i> )
EC0 (48h)	>100 mg/l ( <i>Daphnia Magna</i> )

##### 25322-69-4 Polypropylenglykol

LC50 (96 h)	>100 mg/l ( <i>Oncorhynchus mykiss</i> )
EC50 (48 h)	>100 mg/l ( <i>Daphnia Magna</i> )
ErC50 (72h)	>100 mg/l ( <i>Scenedesmus subspicatus</i> )

##### 28553-12-0 di-"isononyl" phthalate

LC0(96h)	>100 mg/l ( <i>Brachydanio rerio</i> )
LC50 (96 h)	>100 mg/l ( <i>Brachydanio rerio</i> )
EC50 (48 h)	>74 mg/l (D)
EC50 (24h)	>74 mg/l ( <i>Daphnia Magna</i> )
EC50 (0,5h)	>83.9 mg/l (activated sludge)
NOEC/72h	88 mg/l ( <i>Scenedesmus subspicatus</i> )
NOEC / 21d	≥100 mg/l ( <i>Daphnia Magna</i> ) (OECD 202 <i>Daphnia sp. Acute Immobilisation Test</i> )
ErC50 (72h)	>88 mg/l ( <i>Scenedesmus subspicatus</i> )

· **12.2 Persistence and degradability** No further relevant information available.

· **Other information:** Elimination by adsorption onto activated sludge

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

#### · Additional ecological information:

##### · General notes:

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.

· **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

#### · Recommendation

In an appropriate facility or burn in an approved landfill

Dispose. All applicable local and national or regional rules.

#### · Uncleaned packaging:

##### · Recommendation:

The empty containers may not be disposed of unless the adhesive to the container walls

Been removed.

Disposal according to official regulations

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**Trade name EuroCast 4 Part A**

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**SECTION 14: Transport information**

· 14.1 UN-Number	
· ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008  
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS07

- Signal word Warning
- Hazard statements  
H319 Causes serious eye irritation.
- Precautionary statements  
P264 Wash thoroughly after handling.  
P280 Wear 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.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- 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.

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**Trade name EuroCast 4 Part A**

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H319 Causes serious eye irritation.

· **Recommended restriction of use**

The information in this safety data sheet corresponds to the best of our knowledge at the time of the revision. The information should give you clues for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product mentioned in this safety data sheet is mixed with other materials, mixed or processed, or subjected to processing, the information in this safety data sheet, unless expressly stated otherwise, can not be transferred to the new material produced in this way.

Unless expressly described in chapter 1.2, Altrapol products are for industrial use only. They are not intended for use in certain medical applications that are implanted, injected or taken directly (usually 30 days or more) into the human body, and are not intended for the manufacture of multiple-use contraceptives.

· **Department issuing SDS:** environment protection department

· **Contact:** Clayton Whitta Ph. +44 (0) 117 971 5500

· **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 Organisation

ADR: Accord relatif au transport international 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)

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

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

- Creation date version 1 05.02.2003
- 1.1 Product identifier
- Trade name **EuroCast 4 Part B**
- Utilization of the substance of the formulation: Hardener for Polyole
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
For use in the do-it-yourself section is a further information available, see "Fact Sheet for resellers".
- 1.3 Details of the supplier of the safety data sheet  
**Manufacturer/Supplier:**  
**Europol**  
**9 Birchills Trading Estate**  
**Emery Road**  
**Brislington**  
**Bristol BS4 5PF**  
**www.europoluk.com sales@europoluk.com**
- Further information obtainable from: environment protection department
- 1.4 Emergency telephone number:  
During normal opening times (8am - 5pm )  
· phone : +44 (0) 117 971 5500

**SECTION 2: Hazards identification**

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



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
STOT SE 3 H335 May cause respiratory irritation.

- 2.2 Label elements
- **UFI: DFGF-WF6P-E00M-JD0J**
- Labelling according to Regulation (EC) No 1272/2008  
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS07 GHS08

- Signal word **Danger**
- Hazard-determining components of labelling:  
oligomeres MDI
- Hazard statements  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

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**Trade name EuroCast 4 Part B**

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

**· Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 2.3 Other hazards**

Persons with hypersensitivity of the airways (eg asthma, chronic bronchitis) may, with not handle the product. Symptoms in the respiratory tract can also still some hours occur after overexposure. Dust, vapors and aerosols are the primary threat to the Respiratory tract.

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

**· Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

**· 3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture: consisting of the following components.

**· Dangerous components:**

CAS: 32055-14-4 NLP: 500-079-6 Reg.nr.: 01-2119457024-46-xxxx	oligomeres MDI ⚠ Resp. Sens. 1, H334; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	50-75%
CAS: 108-32-7 EINECS: 203-572-1 Reg.nr.: 01-2119537232-48-xxxx	propylene carbonate ⚠ Eye Irrit. 2, H319	10-25%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

**· 4.1 Description of first aid measures**

**· General information:**

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

Immediately remove any clothing soiled by the product.

**· 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:**

In contact with the skin preferably with cleaners based

Polyethylene wash or clean with plenty of hot water and soap. In reactions of Skin doctor immediately.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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**Trade name EuroCast 4 Part B**

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- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
The product is irritating to the respiratory tract and may trigger skin and Respiratory sensitization. Treatment of acute irritation or bronchial is primarily symptomatic. Depending on the degree of exposure and the Complaints may be necessary long-term medical care.
- **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:**  
Extinguishing powder. Do not use water.  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible. Fireman have to wear self-contained breathing apparatus. Do not let enter contaminated extinguishing water into the soil, groundwater or surface waters.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear fully protective suit.  
Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Protective equipment (see section 8). adequate  
Provide ventilation. Keep unnecessary people away.  
Wear protective clothing.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Remove mechanically, with residual wet, absorbent material (eg sawdust, chemical binder based on Calcium silicate hydrate, sand). After approx 1 hour transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several Leave days.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**  
At workplaces, or plant parts on which isocyanate aerosols and / or vapors in higher concentrations can occur (eg, pressure relief, mold venting, Cleaning mixing heads with compressed air) must be replaced by air suction exceeding the

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**Trade name EuroCast 4 Part B**

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occupational exposure limits to be prevented. The air should be of the people carried away. The effectiveness of the equipment must be checked periodically.

Noted in Chapter 8 exposure limits to be monitored.

The personal protective measures described in Chapter 8 are observed.

contact avoid with skin and eyes and inhalation of vapors necessarily.

Keep away from foodstuffs, drinks and tobacco. Before breaks and at end of work

Wash and apply skin cream. Store work clothes separately. contaminated,

Take off immediately all contaminated clothing.

provide for best ventilation in the work space

Prevent formation of aerosols.

Take care by opening

· **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.

· **7.2 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: 20 - 25 °C.

· **Information about storage in one common storage facility:**

Store away from water.

Store away from foodstuffs.

· **Further information about storage conditions:** Keep container tightly sealed.

· **Storage class:** 10

· **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**

### 32055-14-4 oligomeres MDI

Oral	DNEL systemic effects - short term	20 mg/kg bw/day (General population)
Dermal	DNEL Acute systemic effects - short term	50 mg/kg bw/day (workers)
	DNEL Acute local effects - short term	28.7 mg/cm <sup>2</sup> (workers)
	DNEL systemic effects - short term	25 mg/kg bw/day (General population)
Inhalative	DNEL local effects - short term	17.2 mg/cm <sup>2</sup> (General population)
	DNEL Acute systemic effects - short term	0.1 mg/m <sup>3</sup> (workers)
	DNEL Acute systemic effects - long term	0.05 mg/m <sup>3</sup> (workers)
	DNEL Acute local effects - short term	0.1 mg/m <sup>3</sup> (workers)
	DNEL local effects - long term exposure	0.025 mg/m <sup>3</sup> (General population)
		0.05 mg/m <sup>3</sup> (workers)
	DNEL Long-term - systemic effects	0.025 mg/m <sup>3</sup> (General population)
	DNEL local effect - short term	0.05 mg/m <sup>3</sup> (General population)
	DNEL systemic effects - short term	0.05 mg/m <sup>3</sup> (General population)

· **PNECs**

### 32055-14-4 oligomeres MDI

PNEC	>1 mg/kg (soil ( Boden))
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<b>PNEC</b>	>1 mg/l (freshwater) >0.1 mg/l (marine water) >1 mg/l (sewage plant)
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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:**

Unless the exposure levels below the established exposure limits remain is no respiratory protection is required. Where exposures exceed the established exposure limits, respiratory protection to the material and the degree of exposure is recommended accordingly.

A respiratory protection unit offers the same eye and face protection.

The cutting, grinding or sanding of parts after curing can result in respirable dust. Wearing appropriate for this dust respirators may be necessary.

In inadequately ventilated places and during spraying respirator

necessary. Recommended to be fresh-air mask or filter combination for short-term work

A2-P2

· **Protection of hands:**



Protective gloves

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**

Suitable materials for protective gloves, EN 374-3:

Polychloroprene - CR: thickness > = 0.5 mm, breakthrough time > = 480 min.

NBR - NBR: thickness > = 0,35 mm, Breakthrough time > = 480 min.

Butyl rubber - IIR: thickness > = 0.5 mm, breakthrough time > = 480 min.

Fluorine rubber - FKM: thickness > = 0.4 mm; breakthrough time > = 480 min.

Recommendation: Dispose of contaminated gloves ..

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Face protection



Tightly sealed goggles

· **Body protection:** Protective work clothing

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**SECTION 9: Physical and chemical properties**

**· 9.1 Information on basic physical and chemical properties**

**· General Information**

**· Appearance:**

· <b>Form:</b>	Fluid
· <b>Colour:</b>	Light brown
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

**· Change in condition**

· <b>Melting point/freezing point:</b>	41 °C
· <b>Initial boiling point and boiling range:</b>	> 300 °C (bei 1013 hPa)

· **Flash point:** > 200 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 400 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

**· Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapour pressure at 25 °C:** 0,0002 hPa

· <b>Density at 20 °C:</b>	1,2 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with water:** Insoluble.

· **Partition coefficient: n-octanol/water:** Not determined.

**· Viscosity:**

· <b>Dynamic at 20 °C:</b>	100 mPas
· <b>Kinematic:</b>	Not determined.

**· Solvent content:**

· <b>Organic solvents:</b>	0,0 %
· <b>VOC (EC)</b>	0.0 g/l

· **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:** > 200 °C polymerisation, CO<sub>2</sub> separation.

· **10.3 Possibility of hazardous reactions**

Exothermic reaction with amines and alcohols; reacts with water forming CO<sub>2</sub>, in closed containers risk of bursting owing to increase of pressure.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** water , alcohol , amine , base and acid

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**Trade name EuroCast 4 Part B**

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· **10.6 Hazardous decomposition products:** At the air > 300 °C: acrolein

**SECTION 11: Toxicological information**

· **11.1 Information on toxicological effects**

· **Acute toxicity**

Harmful if inhaled.

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

Test atmosphere: dust / mist

Method: OECD Test Guideline 403

Toxicological studies of a comparable product. The fabric was in a Form (ie, special particle size distribution) tested which differ from the forms, as marketed and used in all probability, is different. Therefore, a modified classification of acute inhalation toxicity justified.

**32055-14-4 oligomeres MDI**

Oral	LD50	10,000 mg/kg (Ratte)
Dermal	LD50	9,400 mg/kg (Kaninchen)
Inhalative	LC50/4 h	0.31 mg/l (Ratte)

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Causes skin irritation.

· **Serious eye damage/irritation**

Causes serious eye irritation.

· **Respiratory or skin sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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**

May cause respiratory irritation.

· **STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:**

**32055-14-4 oligomeres MDI**

LC50 (96 h)	>1,000 mg/l (Danio Rerio) (OECD- Prüfrichtlinie 203)
EC50 (24h)	>1,000 mg/l (Daphnia Magna) (OECD Prüfrichtlinie 202)
EC50(3h)	>100 mg/l (activated sludge) (OECD Prüfrichtlinie 209)

· **12.2 Persistence and degradability** No further relevant information available.

· **Other information:** Elimination by adsorption onto activated sludge

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 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.

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system. Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate waste code according to the European Waste Catalogue (EWC) should be used.
- **Uncleaned packaging:**
- **Recommendation:**  
Packaging must be emptied directly after the last product removal (tear drops, powder rest, scraped carefully). After neutralization of adhering to the walls of residues are product and labeling of hazardous substances to devalue. These packages can packaging-specifically to access points to the existing collection systems chemical industry will be given for recycling. Containers must be recycled in accordance with national legislation and environmental regulations occur.

**SECTION 14: Transport information**

- |   |  |
|---|--|
| · <b>14.1 UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void   |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void   |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void   |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void   |
| · <b>14.5 Environmental hazards:</b><br>· <b>Marine pollutant:</b>                          | No   |
| · <b>14.6 Special precautions for user</b>  | No dangerous cargo.<br>Avoid temperatures below 0 ° C. Heat above +50 ° C.<br>Protect from moisture.<br>Keep away from food, stimulants, acids and alkalis |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable.  |
| · <b>UN "Model Regulation":</b>   | Void   |

**SECTION 15: Regulatory information**

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



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*oligomeres MDI*

· **Hazard statements**

*H332 Harmful if inhaled.*

*H315 Causes skin irritation.*

*H319 Causes serious eye irritation.*

*H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.*

*H317 May cause an allergic skin reaction.*

*H335 May cause respiratory irritation.*

*H373 May cause damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

*P260 Do not breathe dust/fume/gas/mist/vapours/spray.*

*P280 Wear protective gloves / eye protection / face protection.*

*P284 [In case of inadequate ventilation] wear respiratory protection.*

*P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

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

*P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.*

*P405 Store locked up.*

*P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **National regulations:**

· **Waterhazard class:** Water hazard class 1 (VwVwS 17.05.99): slightly 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**

*H315 Causes skin irritation.*

*H317 May cause an allergic skin reaction.*

*H319 Causes serious eye irritation.*

*H332 Harmful if inhaled.*

*H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.*

*H335 May cause respiratory irritation.*

*H373 May cause damage to organs through prolonged or repeated exposure.*

· **Department issuing SDS:** environment protection department

· **Contact:** Herr Ottensmann Tel. +49 (0)2056-25863-7

· **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 Organisation*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

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*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)*  
*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*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*Acute Tox. 4: Acute toxicity – Category 4*  
*Skin Irrit. 2: Skin corrosion/irritation – Category 2*  
*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*  
*Resp. Sens. 1: Respiratory sensitisation – Category 1*  
*Skin Sens. 1: Skin sensitisation – Category 1*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*  
*STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

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

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