

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

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

- **1.1 Product identifier**
- **Trade name:** Härter Aqua LE
- **Article number:** 75906
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Hardening agent/ Curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FORBO Eurocol Deutschland GmbH
August-Roebling-Str. 2
D-99091 Erfurt
Tel.: +49 (0)361 73041-0
Fax: +49 (0)361 73041-92
Website: <http://www.forbo-bonding.de>
- **Further information obtainable from:**
Laboratory
Ronny Dorna
Ronny.Dorna@forbo.com
- **1.4 Emergency telephone number:** GGIZ +49-361-730730 (for Germany)

SECTION 2: Hazards identification

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



GHS07

Acute Tox. 4	H332 Harmful if inhaled.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.
.....	
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **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-determining components of labelling:**
aliphatic polyisocyanate

(Contd. on page 2)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 1)

· Hazard statements

- H332 Harmful if inhaled.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

- Restricted to professional users.
 Safety data sheet available on request.
 EUH204 Contains isocyanates. May produce an allergic reaction.

· 2.3 Other hazards**· 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 of substances listed below with nonhazardous additions.

· Dangerous components:

160994-68-3	aliphatic polyisocyanate	50-75%
	 Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	

- **Additional information:** For the wording of the listed risk 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.
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

- Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
 In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 2)

- **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.
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:**
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
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Hydrogen cyanide (HCN)
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Do not allow to enter drains/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Do not seal receptacles gas-tight.
Danger of bursting.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

GB

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from humidity and water.
- **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.
 - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
 - **Respiratory protection:**



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.

- **Recommended filter device for short term use:** Combination filter A2-P2
- **Protection of hands:**



Protective gloves

- **Material of gloves**
Butyl rubber, BR

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 4)

*Recommended thickness of the material: ≥ 0.5 mm**Fluorocarbon rubber (Viton)**Recommended thickness of the material: ≥ 0.4 mm*

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.

- **Eye protection:**



Safety glasses

- **Body protection:** Impervious protective clothing

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Weak

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	175 °C (DIN 53171)

- **Flash point:** 61 °C (DIN EN ISO 2719)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 300 °C (DIN 51794)

- **Decomposition temperature:** Undetermined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapour pressure at 20 °C:** 15 hPa (EG A4)

- **Density at 20 °C:** 1.06 g/cm³ (DIN 51757)

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Undetermined.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 5)

- | | |
|--|--|
| · Viscosity:
Dynamic at 20 °C: | 91 mPas (DIN 53019) |
| · Solvent content:
Organic solvents:
VOC (CE) | 35.0 %
0.00 % |
| · 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 amines.
Reacts with alcohols.
Exothermic reaction.
Reacts with water.
Develops
Carbon dioxide
Danger of bursting.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if inhaled.

· LD/LC50 values relevant for classification:
--

160994-68-3 aliphatic polyisocyanate

Oral	LD50	>2000 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** slightly irritant
- **Serious eye damage/irritation** slightly irritant
- **Respiratory or skin sensitisation**
No sensitising effects known.
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** Based on available data, the classification criteria are not met.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 6)

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

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

160994-68-3 aliphatic polyisocyanate

EC50/48h >100 mg/l (*Daphnia magna*) (OECD 202)

EC50/72h >77.4 mg/l (*Scenedesmus suspicatus*)

LC50/96h 28.3 mg/l (zebrafish (*Brachydanio rerio*)) (OECD 203)

· **12.2 Persistence and degradability** Not easily biodegradable

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

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

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **Behaviour in sewage processing plants:**

Type of test	Effective concentration	Method	Assessment
160994-68-3 aliphatic polyisocyanate			
EC50/3h	>10000 mg/l	(activated sludge)	(OECD 209)

160994-68-3 aliphatic polyisocyanate

EC50/3h >10000 mg/l (activated sludge) (OECD 209)

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

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

· **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.

· **Uncleaned packaging:**

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

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, ADN, IMDG, IATA**

Void

(Contd. on page 8)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 7)

· 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.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
Harmful to aquatic organisms
Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed. (94/33/EC)
Employment restrictions concerning pregnant and lactating women must be observed. (92/85/EC)
- **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**
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
- **Department issuing MSDS:** Laboratory

(Contd. on page 9)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.06.2015

Version number 5

Revision: 24.06.2015

Trade name: Härter Aqua LE

(Contd. of page 8)

· **Contact:**

Dr. Amina Chnirheb

Amina.Chnirheb@forbo.com

· **Abbreviations and acronyms:**

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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

GB