MEMI®

according to 1907/2006/EC, Article 31

Printing date 19.11.2019 Version number 2 Revision: 19.11.2019

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

· 1.1 Product identifier

· Trade name: Everclear 510 1:1, Komponente A

11475, 11452_A, 11482 Article number:

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

· Application of the substance / the

No further relevant information available.

Polyurethane resin mixture

· 1.3 Details of the supplier of the safety data sheet

AKEMI chemisch technische Spezialfabrik GmbH · Manufacturer/Supplier:

Laboratory

Lechstrasse 28 D 90451 Nürnberg

Tel. +49(0)911-642960 Fax. +49(0)911-644456 e-mail info@akemi.de

· Further information obtainable from:

· 1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH

Tel. +49(0)911-64296-59

Reachable during the following office hours: Monday – Thursday from 07:30 a.m. to 16:30 p.m.

Friday from 07:30 a.m. to 13:30 p.m.

+44 (171) 635 91 91

National Poison Inform. Centre

Medical Toxicology Unit **Avalonley Road**

London SE14 5ER

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.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 2.2 Label elements

Labelling according to Regulation

(EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS07 Warning

· Signal word

· Hazard-determining components

of labelling:

tetraethyl-N.N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-

dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-

poly($\alpha_1,2$ -ethanediyl), α_1 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-

hydroxyphenyl]-1-oxopropyl]-ω-hydroxybis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate

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H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful 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.
P103 Read label before use.
P261 Avoid breathing vapours.
P273 Avoid release to the environment.

P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/

regional/national/international regulations.

· 2.3 Other hazards

· Hazard statements

· Results of PBT and vPvB assessment

PBT: Not applicable.√PvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 136210-30-5 ELINCS: 429-270-1 Index number: 607-521-00-8 Reg.nr.: 01-0000017556-64-0000	tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate Skin Sens. 1, H317 Aquatic Chronic 3, H412	50-100%
CAS: 623-91-6 EINECS: 210-819-7	diethyl fumarate Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	1-5%
CAS: 104810-47-1 Index number: 607-176-00-3 Reg.nr.: 01-2119396032-43	poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- Aquatic Chronic 2, H411 Skin Sens. 1, H317	1-5%
CAS: 104810-48-2	poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy- STOT RE 2, H373 Aquatic Chronic 2, H411 Skin Sens. 1, H317	1-5%
CAS: 41556-26-7 Reg.nr.: 01-2119491304-40	bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	<1%
CAS: 82919-37-7 EINECS: 280-060-4	methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	<1%
		•

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

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SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.

Supply fresh air and to be sure call for a doctor. · After inhalation:

In case of unconsciousness place patient stably in side position for

transportation.

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

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a

No further relevant information available.

Do not induce vomiting; call for medical help immediately. · After swallowing:

· 4.2 Most important symptoms and effects, both acute and delaved

· 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:

> Carbon monoxide (CO) Nitrogen oxides (NOx) Hydrogen cyanide (HCN)

· 5.3 Advice for firefighters

Wear self-contained respiratory protective device. · Protective equipment:

Collect contaminated fire fighting water separately. It must not enter the sewage Additional information

system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and

Wear protective equipment. Keep unprotected persons away. emergency procedures

Ensure adequate ventilation

· 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage

system.

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).

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.

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SECTION 7: Handling and storage

· 7.1 Precautions for safe

handling Ensure good ventilation/exhaustion at the workplace.

· 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:

Protect from frost. Store in cool, dry conditions in well sealed receptacles.

· 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

136210-30-5 tetraethyl-N.N'-(methylenedicyclohexane-4.1-diyl)bis-DL-aspartate

130210-30	1002 10-00-0 tetraetriyi-in,in -(metriyichedicyclonexano-4, 1-diyi/bis-be-aspartate		
Oral	DNEL (Kurzzeit-akut)	1.4 mg/kg bw/day (BEV)	
	DNEL (Langzeit-wiederholt)	4 mg/kg bw/day (ARB)	
		1.4 mg/kg bw/day (BEV)	
Dermal	DNEL (Kurzzeit-akut)	1.4 mg/kg bw/day (BEV)	
	DNEL (Langzeit-wiederholt)	4 mg/kg bw/day (ARB)	
		1.4 mg/kg bw/day (BEV)	
Inhalative	DNEL (Kurzzeit-akut)	112 mg/m³ Air (ARB)	
		4.8 mg/m³ Air (BEV)	
	DNEL (Langzeit-wiederholt)	28 mg/m³ Air (ARB)	
		4.8 mg/m³ Air (BEV)	

· PNECs

136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

PNEC (wässrig) 31.1 mg/l (KA)

0.000013 mg/l (MW) 0.00013 mg/l (SW)

PNEC (fest) 0.1 mg/kg Trockengew (BO)

> 0.02 mg/kg Trockengew (MWS) 0.21 mg/kg Trockengew (SWS)

· Additional information:

The lists valid during the making were used as basis.

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8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic

measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· 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.

Short term filter device:

Filter A/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.

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

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

· Eye protection:

· Material of gloves



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: Colourless

· Odour: Weak, characteristic

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· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. : Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapour pressure:	Not determined.	
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1.1 g/cm ³ Not determined. Not determined. Not determined.	
· <u>Solubility in / Miscibility with</u> <u>water:</u>	Not miscible or difficult to mix.	
· Partition coefficient: n-octanol/water:	Not determined.	
· <u>Viscosity:</u> Dynamic: <u>Kinematic:</u>	Not determined. Not determined.	
· Solvent content:		
Solids content: • 9.2 Other information	6.4 % 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:

conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous

<u>reactions</u> No dangerous reactions known.

• 10.4 Conditions to avoid
• 10.5 Incompatible materials:

No further relevant information available.

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 Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 65,398 mg/kg (rat)

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136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate			
Oral	LD50	>2,000 mg/kg	g (rat) (Richtlinie 67/548/EWG, Anhang V, B.1.)
Dermal	LD50	>2,000 mg/kg	g (rat) (Richtlinie 67/548/EWG, Anhang V, B.3.)
Inhalative	LC50/4h	>4,224 mg/m	3 (rat) (OECD-Prüfrichtlinie 403)
623-91-6 diethyl fumarate			
Oral	LD50	1,780 mg/kg (rat)	
104810-48-2 poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]- 1-oxopropyl]-ω-hydroxy-			
Oral	LD50		(rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)	
Inhalative	LC50	>5.8 mg/l (rat) (OECD 403)	
41556-26-7 bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat			
Oral	LD50	3,230 mg/kg ((rat)
Dermal	LD50	>2,000 mg/kg (rat)	
· Primary ir	ritant effec	ot:	
		tion	Based on available data, the classification criteria are not met.
Serious eye damage/irritation			Causes serious eye irritation.
Respiratory or skin sensitisation			May cause an allergic skin reaction.
· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)			
· Germ cell mutagenicity		city	Based on available data, the classification criteria are not met.
0			

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

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Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Carcinogenicity

· Aspiration hazard

· Reproductive toxicity

STOT-single exposure

STOT-repeated exposure

12.1 TOXICI	12.1 TOXICILY		
· Aquatic toxicity:			
136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate			
EC50	3,110 mg/l (BES) (ISO Vorschrift 8192-1986 E)		
IC50/72h	113 mg/l (Scenedesmus subspicatus) (Richtlinie 67/548/EWG, Anhang V, C.3.)		
EC50/48h	8h 88.6 mg/l (daphnia magna) (UBA-Verfahrensvorschlag Mai 1984)		
ErC50/72h	0/72h 113 mg/l (Scenedesmus subspicatus)		
NOEC	100 mg/kg (Ac) (OECD 208)		
	100 mg/kg (As) (OECD 208)		
	100 mg/kg (Bn) (OECD 208)		
	≥1,000 mg/kg (Eisenia fetida (Regenwürmer)) (OECD-Prüfrichtlinie 207)		
NOEC/21d	0.01 mg/l (daphnia magna) (Richtlinie 67/548/EWG, Anhang V, C.20.)		
LC50/96h	66 mg/l (Danio rerio.) (OECD 203)		
104810-48-2 poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-			
	1-oxopropyl]-ω-hydroxy-		
EC50	>9 mg/l (green alge) (OECD 201)		
	3.8 mg/l (daphnia magna) (OECD 202)		
LC50	2.8 mg/l (piscis) (OECD 203)		
41556-26-7 bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat			
EC50/24h	20 mg/l (daphnia magna) (OECD 202)		
EC50	>100 mg/l (BES) (OECD 209)		
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EC50/72h 1.68 mg/l (Desmodesmus subspicatus) (OECD 201)

LC50/96h 0.97 mg/l (lepomis macrochirus)

7.9 mg/l (Oncorhynchus mykiss) (OECD 203: ISO 7346; 92/69/EWG, C.1)

· 12.2 Persistence and

Not easily biodegradable degradability

12.3 Bioaccumulative potential Non significant accumulation in organisms No further relevant information available. · 12.4 Mobility in soil

· Ecotoxical effects:

Harmful to fish · Remark:

· Additional ecological information:

· General notes: Harmful to aquatic organisms

Water hazard class 1 (German Regulation) (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

Must not be disposed together with household garbage. Do not allow product to · Recommendation

reach sewage system.

Uncleaned packaging:

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

SECTION 14: Transport information

· <u>14.1 UN-Number</u> · <u>ADR, ADN, IMDG, IATA</u>	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
· <u>ADR, ADN, IMDG, IATA</u> · <u>Class</u>	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 Marpol and the IBC Code	of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void
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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.

· REGULATION (EC) No 1907/2006

ANNEX XVII Conditions of restriction: 3

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.

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

· VOC EU 0.0 g/l

· 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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Department issuing SDS: Laboratory

· Contact: Dieter Zimmermann

Elke Hake

Fon ++49 (0)911 64296-59 @mail E.Hake@akemi.de

· 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)

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)

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 Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

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Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3