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

1.1. Product identifier

Professional Wall Armor

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

Use of the substance/preparation

Liquid laminate

Identified Uses

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at nondedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC19	Manual activities involving hand contact
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8d	Wide dispersive outdoor use of processing aids in open systems

Uses advised against

SU21	Consumer uses: Private households (= general public = consumers)

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Marabu GmbH & Co. KG
Asperger Strasse 4
71732 Tamm
Germany

Telephone no.	+49-7141/691-0
Information provided by / telephone	Department product safety
E-mail address of person responsible for this SDS	PRSI@marabu.com

1.4. Emergency telephone number

(+49) (0)621-60-43333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1A	H317
Aquatic Chronic 3	H412

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Warning

Hazard statements

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P261.9	Avoid breathing vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate; reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene); reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1); 1,2-Benzisothiazol-3(2h)-one; Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Supplemental information

Labelling according to regulation (EU) No 528/2012

Contains a biocidal product: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures

Hazardous ingredients ***

2,4,7,9-Tetramethyl-4,7-decanediol

CAS No. 17913-76-7

Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

EINECS no.	400-830-7				
Registration no.	01-0000015075-76				
Concentration	>=	0,1	<	1	%

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317
Aquatic Chronic 2	H411

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

CAS No.	41556-26-7				
Concentration	>=	0,25	<	1	%

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1A	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410
Repr. 2	H361

Triethylamine

CAS No.	121-44-8				
EINECS no.	204-469-4				
Concentration	>=	0,1	<	1	%

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1A	H314
Flam. Liq. 2	H225
Acute Tox. 3	H331
Acute Tox. 3	H311
Acute Tox. 4	H302

Concentration limits (Regulation (EC) No. 1272/2008)

STOT SE 3	H335	>= 1

Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

CAS No.	82919-37-7				
EINECS no.	280-060-4				
Concentration	>=	0,1	<	0,25	%

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

1,2-Benzisothiazol-3(2h)-one

CAS No.	2634-33-5				
EINECS no.	220-120-9				
Concentration			<	0,05	%

Classification (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400
Skin Sens. 1	H317
Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
Acute Tox. 2	H330
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317	>= 0,05

Octamethylcyclotetrasiloxane

CAS No. 556-67-2
EINECS no. 209-136-7
Registration no. 01-2119529238-36
Concentration >= 0,01 < 0,025 %

Classification (Regulation (EC) No. 1272/2008)

Repr. 2	H361f
Aquatic Chronic 1	H410
Flam. Liq. 3	H226

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Chronic 1	H410	M = 10

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

CAS No. 55965-84-9
Concentration < 0,001 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 2	H330
Aquatic Chronic 1	H410
Aquatic Acute 1	H400
Skin Sens. 1A	H317
Skin Corr. 1C	H314
Acute Tox. 2	H310
Acute Tox. 3	H301
Eye Dam. 1	H318

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Corr. 1C	H314	>= 0,6
Eye Irrit. 2	H319	>= 0,06 < 0,6
Skin Irrit. 2	H315	>= 0,06 < 0,6
Skin Sens. 1	H317	>= 0,0015
Aquatic Acute 1	H410	M = 100
Aquatic Chronic 1	H410	M = 100
Eye Dam. 1	H318	>= 0,6 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Aalcohol resistant foam, CO2, powders, water spray/mist, Not be used for safety reasons: water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO); dense black smoke

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Classification of fires / temperature class / Ignition group / Dust explosion class

Temperature class T3

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in accordance with national regulation

Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Further information on storage conditions

Store between 15 and 30 °C in a dry, well ventilated place. Keep container tightly closed. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Liquid laminate

SECTION 8: Exposure controls/personal protection ***

8.1. Control parameters

Exposure limit values

Triethylamine

List	EH40			
Type	WEL			
Value	8	mg/m³	2	ppm(V)
Short term exposure limit	17	mg/m³	4	ppm(V)

Skin resorption / sensibilisation: Sk: 2011

Triethylamine

List	EU			
Value	8,4	mg/m³	2	ppm(V)
Short term exposure limit	12,6	mg/m³	3	ppm(V)

Skin resorption / sensibilisation: Skin; Remarks: 2000/39/EG

Derived No/Minimal Effect Levels (DNEL/DMEL) ***

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,35	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,5	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,085	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,25	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,025	mg/kg

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3,53	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	2,0	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	1,00	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,87	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,50	mg/kg

2,4,7,9-Tetramethyl-4,7-decanediol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	24,7	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	7	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	4,35	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	2,5	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	2,5	mg/kg/d

Triethylamine

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	12,6	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	12,6	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	12,1	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	8,4	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	8,4	mg/m³

Octamethylcyclotetrasiloxane

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	73	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	73	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	73	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	73	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	13	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	13	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	13	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	13	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	3,7	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	3,7	mg/kg/d

Predicted No Effect Concentration (PNEC) ***

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Type of value	PNEC	
Type	Freshwater	
Concentration	0,0023	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0,00023	mg/l

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,028	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	3,06	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	0,306	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	2	mg/kg

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Type of value	PNEC	
Type	Freshwater	
Concentration	0,0022	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,00022	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,009	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	1,05	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,11	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,21	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	1	mg/l

2,4,7,9-Tetramethyl-4,7-decanediol

Type of value	PNEC	
Type	Freshwater	
Concentration	0,053	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,005	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	4,6	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,46	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,53	mg/kg

Triethylamine

Type of value	PNEC	
Type	Freshwater	
Concentration	0,11	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0,011	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	1,575	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,25	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,158	mg/kg
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,08	mg/l

Octamethylcyclotetrasiloxane

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00044	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000044	mg/l
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,013	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,128	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,136	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Respiratory protection

Not applicable.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness	>	0,5	mm
Breakthrough time	<	30	min

The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection

Use safety eyewear designed to protect against splash of liquids.

Body protection

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid			
Colour	milky white			
Odour	mild			
Melting point				
Remarks	not determined			
Freezing point				
Remarks	not determined			
Boiling point or initial boiling point and boiling range				
Value	appr.	100		°C
Pressure		1.013	hPa	
Source	Literature value			
Flammability				
Not applicable				
Upper and lower explosive limits				
Lower explosion limit	appr.	1,2		%(V)
Upper explosion limit	appr.	11,6		%(V)
Source	Literature value			
Flash point				
Remarks	Not applicable			
Ignition temperature				
Value	appr.	220		°C
Source	Literature value			
pH value				
Remarks	not determined			
Viscosity				
Remarks				
Remarks	not determined			

Partition coefficient n-octanol/water (log value)

Remarks: Not applicable

Vapour pressure

Remarks: not determined

Density and/or relative density

Remarks: not determined

Relative vapour density

Remarks: not determined

9.2. Other information

Odour threshold

Remarks: No data available

Evaporation rate (ether = 1) :

Remarks: not determined

Solubility in water

Remarks: miscible

Explosive properties

evaluation: no

Oxidising properties

evaluation: None known

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4. Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

10.6. Hazardous decomposition products

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

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

Acute oral toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyet

hylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	rat		
LD50	>	5000	mg/kg
Method	OECD 401		

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Species	rat		
LD50		3230	mg/kg

1,2-Benzisothiazol-3(2h)-one

Species	rat		
LD50		1193	mg/kg

Triethylamine

Species	rat		
LD50		730	mg/kg
Method	OECD 401		

Acute dermal toxicity

ATE	>	2.000	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)		

Acute dermal toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	rat		
LD50	>	2000	mg/kg
Method	OECD 402		

1,2-Benzisothiazol-3(2h)-one

Species	rat		
LD50		4115	mg/kg

Triethylamine

Species	rabbit		
LD50		580	mg/kg
Method	OECD 402		

Acute inhalational toxicity

ATE	>	20	mg/l
Administration/Form	Vapors		
Method	calculated value (Regulation (EC) No. 1272/2008)		
ATE	>	5	mg/l
Administration/Form	Dust/Mist		
Method	calculated value (Regulation (EC) No. 1272/2008)		
Remarks	Based on available data, the classification criteria are not met.		

Acute inhalative toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	rat			
LC50	>	5,8		mg/l
Duration of exposure		14	d	
Administration/Form	Dust/Mist			
Method	OECD 403			

Triethylamine

Species	rat		
LC50	7,1		mg/l
Duration of exposure	4	h	
Administration/Form	Vapors		

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Sensitization

evaluation May cause sensitization by skin contact.

Remarks The classification criteria are met.

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Single exposure

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

Repeated exposure

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

Aspiration hazard

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

Experience in practice

The liquid splashed in the eyes may cause irritation and reversible damage. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Other information

There are no data available on the mixture itself.
The mixture has been assessed following the additivity method of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.

SECTION 12: Ecological information

12.1. Toxicity

General information

There are no data available on the mixture itself.Do not allow to enter drains or water courses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Fish toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	2,8		mg/l
Duration of exposure	96	h	

Method	OECD 203		

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Species	Bluegill (Lepomis macrochirus)		
LC50	0,97		mg/l
Duration of exposure	96	h	
Method	OECD 203		

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	7,9		mg/l
Duration of exposure	96	h	
Method	OECD 203		

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Species	zebra fish (Brachydanio rerio)		
LC50	0,9		mg/l
Duration of exposure	96	h	
Method	OECD 203		

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	0,188		mg/l
Duration of exposure	96	h	

1,2-Benzisothiazol-3(2h)-one

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	2,18		mg/l
Duration of exposure	96	h	

Daphnia toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	Daphnia magna		
EC50	4,0		mg/l
Duration of exposure	48	h	
Method	OECD 202		

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

Species	Daphnia magna		
EC50	20		mg/l
Duration of exposure	24	h	
Method	OECD 202		

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Species	Daphnia magna		
EC50	0,126		mg/l
Duration of exposure	48	h	

1,2-Benzisothiazol-3(2h)-one

Species	Daphnia magna		
EC50	2,94		mg/l
Duration of exposure	48	h	

Algae toxicity (Components)

reaction mass of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Species	Desmodesmus		

EC50	>	9	mg/l
Duration of exposure		72 h	
Method		OECD 201	

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Species		Selenastrum capricornutum	
EC50		0,027	mg/l
Duration of exposure		72 h	

1,2-Benzisothiazol-3(2h)-one

Species		Pseudokirchneriella subcapitata	
ErC50		0,11	mg/l
Duration of exposure		72 h	

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient n-octanol/water (log value)

Remarks Not applicable

12.4. Mobility in soil

General information

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

General information

There are no data available on the mixture itself.

12.7. Other adverse effects

General information

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses.
Wastes and emptied containers should be classified in accordance with relevant national regulation.
The European Waste Catalogue classification of this product, when disposed of as waste is

EWC waste code	08 03 12*	waste ink containing dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.
Empty containers must be scrapped or reconditioned.
Not emptied containers are hazardous waste (waste code number 150110).

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport.-	The product does not constitute a hazardous substance in sea transport.-	The product does not constitute a hazardous substance in air transport.-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards	-	no	-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:
Always transport in closed containers that are upright and secure.
Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

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

VOC

VOC (EU) 4,57 %

Other information

The product does not contain substances of very high concern (SVHC).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H402	Harmful 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.

CLP categories listed in Chapter 3

Acute Tox. 2	Acute toxicity, Category 2
Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Acute 3	Hazardous to the aquatic environment, acute, Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.
The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.
As the specific conditions of use of the product are outside the supplier’s control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.
The information contained in this safety data sheet does not constitute the user’s own assessment of workplace risks, as required by other health and safety legislation.