

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Trade name : Fix ALL Flexi

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Professional use, Consumer use
Use of the substance/mixture : Sealants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet**Supplier**

Soudal N.V.
Everdongenlaan 18-20
2300 Turnhout
Belgium
T +32 14 42 42 31 - F +32 14 42 65 14
sds@soudal.com - www.Soudal.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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Component	
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
trimethoxyvinylsilane (2768-02-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxyhexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	EC-No.: 432-430-3 EC Index-No.: 616-200-00-1 REACH-no: 01-0000017860-69	≥ 1 – < 5	Aquatic Chronic 4, H413
trimethoxyvinylsilane	CAS-No.: 2768-02-7 EC-No.: 220-449-8 EC Index-No.: 014-049-00-0 REACH-no: 01-2119513215-52	≥ 0,1 – < 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 (ATE=16,8 mg/l/4h) Skin Sens. 1B, H317
N-(3-(trimethoxysilyl)propyl)ethylenediamine	CAS-No.: 1760-24-3 EC-No.: 217-164-6 REACH-no: 01-2119970215-39	≥ 0.1 – < 1	Skin Sens. 1B, H317 Eye Dam. 1, H318 STOT SE 3, H335
dioctylbis(pentane-2,4-dionato-O,O')tin substance with national workplace exposure limit(s) (BE)	CAS-No.: 54068-28-9 EC-No.: 483-270-6 REACH-no: 01-0000020199-67	≥ 0,1 – < 1	Skin Sens. 1, H317 STOT SE 2, H371
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	CAS-No.: 52829-07-9 EC-No.: 258-207-9 REACH-no: 01-2119537297-32	≥ 0,1 – < 1	Eye Dam. 1, H318 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411 (M=1)

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.

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First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at room temperature. Store in a well-ventilated place. Keep container closed when not in use.
Maximum storage period : ≈ 1 year
Packaging materials : Synthetic material.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
Belgium - Occupational Exposure Limits	
OEL TWA	0,1 mg/m ³
OEL STEL	0,2 mg/m ³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1,8 mg/kg bw/day
Long-term - systemic effects, inhalation	1,27 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0,18 mg/kg bw/day
Long-term - systemic effects, inhalation	0,31 mg/m ³
Long-term - systemic effects, dermal	0,9 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	0,004 mg/l
PNEC aqua (marine water)	0,38 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	5,9 mg/kg dwt
PNEC sediment (marine water)	0,59 mg/kg dwt
PNEC (Soil)	
PNEC soil	1,18 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l
reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxihexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	10 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	35,24 mg/m ³

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reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxihexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,009 mg/l
PNEC aqua (marine water)	0,001 mg/l
PNEC aqua (intermittent, freshwater)	3,7 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	384 mg/kg dwt
PNEC sediment (marine water)	38,4 mg/kg dwt
PNEC (Soil)	
PNEC soil	52,1 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	222,2 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l
trimethoxyvinylsilane (2768-02-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	3,9 mg/kg bw/day
Long-term - systemic effects, inhalation	27,6 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	26,9 mg/kg bodyweight/day
Acute - systemic effects, inhalation	93,4 mg/m ³
Long-term - systemic effects, oral	0,3 mg/kg bw/day
Long-term - systemic effects, inhalation	18,9 mg/m ³
Long-term - systemic effects, dermal	7,8 mg/kg bw/day
PNEC (Water)	
PNEC aqua (intermittent, freshwater)	3,4 mg/l
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	84 mg/m ³
Acute - local effects, inhalation	0,091 mg/m ³
Long-term - systemic effects, dermal	0,07 mg/kg bw/day
Long-term - systemic effects, inhalation	84 mg/m ³
Long-term - local effects, inhalation	0,091 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,026 mg/l
PNEC aqua (marine water)	0,0026 mg/l

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dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
PNEC aqua (intermittent, freshwater)	0,26 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,155 mg/kg dwt
PNEC sediment (marine water)	0,0155 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,0158 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Various colours.
Appearance	: Pasty.
Odour	: characteristic.

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Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1,045 g/cm ³ (20°C)
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
LD50 oral rat	3700 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 3170 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	0,5 mg/l air (Equivalent or similar to OECD 403, 4 weeks (daily, 5 days / week), Rat, Male / female, Experimental value, Inhalation (aerosol), 7 day(s))

reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxyhexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecanamide)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

trimethoxyvinylsilane (2768-02-7)	
LD50 oral rat	6899 – 7012 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	3158 – 3760 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	16,8 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
LD50 oral rat	2500 mg/kg (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/g (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	5,1 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
LD50 oral rat	2295 mg/kg bodyweight (EPA OPPTS 870.1100: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight (EPA OPPTS 870.1200: Acute Dermal Toxicity, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	1,49 – 2,44 mg/l air (EPA OPPTS 870.1300: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Skin corrosion/irritation : Not classified

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
pH	9,7 (1 %)

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
pH	10,2 (1 %)

Serious eye damage/irritation : Not classified

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
pH	9,7 (1 %)

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
pH	10,2 (1 %)

Respiratory or skin sensitisation : Not classified. (On basis of test data. Skin sensitisation Not classified)

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Skin Sensitisation (test on mixture), Skin, In vitro	Not sensitising (OECD 497)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified
trimethoxyvinylsilane (2768-02-7)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
NOAEL (animal/female, F0/P)	250 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
NOAEL (animal/male, F0/P)	0,3 – 0,4 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (animal/female, F0/P)	0,3 – 0,5 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
STOT-single exposure	: Not classified
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
STOT-single exposure	May cause damage to organs (immune system) (if swallowed).
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxylhexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecanamide)	
NOAEL (subacute, oral, animal/male, 28 days)	1000 mg/kg bodyweight (Literature Study)
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
LOAEC (inhalation, rat, gas, 90 days)	650 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
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Viscosity, kinematic	Not applicable
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
Viscosity, kinematic	Not applicable (solid)
trimethoxyvinylsilane (2768-02-7)	
Viscosity, kinematic	0,7 mm ² /s (20 °C)
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
Viscosity, kinematic	25,1 mm ² /s (40 °C, OECD 114: Viscosity of Liquids)
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Viscosity, kinematic	3,1 mm ² /s (20 °C, Calculated)

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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

Not rapidly degradable

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)

LC50 - Fish [1]	4,4 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)
ErC50 algae	0,705 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic crustacea	0,23 mg/l (OECD211, 21d, Daphnia Magna, experimental result)

reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxyhexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)

LC50 - Fish [1]	> 1000 mg/l (Guideline OECD203, 96h, Oncorhynchus mykiss, Static system, Fresh water, Read-across)
EC50 - Crustacea [1]	> 1000 mg/l (Guideline OECD 202, 48h, Daphnia Magna, Static system, Experimental value)
EC50 72h - Algae [1]	85 mg/l (Guideline EPIWIN 3.10, 96h, Algae, Calculated value)
NOEC chronic crustacea	0,9 mg/l (Guideline OECD 211, 21d, Daphnia Magna, Semi-static system, Fresh water, Experimental value)

trimethoxyvinylsilane (2768-02-7)

LC50 - Fish [1]	191 mg/l (96 h, Oncorhynchus mykiss, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	168,7 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	> 89 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic algae	89 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)

LC50 - Fish [1]	71,1 mg/l (96 h, Salmo gairdneri, Flow-through system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	47,6 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Other aquatic organisms [1]	75 mg/l Test organisms (species): other:
ErC50 algae	32 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

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N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
LC50 - Fish [1]	597 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	81 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	126 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	8,8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)
NOEC chronic algae	3,1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
Persistence and degradability	not readily degradable in water.
reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxihexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	
Biodegradation	20 % (OECD 301B: CO2 Evolution Test, 28d, Experimental value)
trimethoxyvinylsilane (2768-02-7)	
Persistence and degradability	not readily degradable in water.
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
Persistence and degradability	not readily degradable in water.
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Persistence and degradability	not readily degradable in water.

12.3. Bioaccumulative potential

bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	
Partition coefficient n-octanol/water (Log Pow)	0,35 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxihexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	
Partition coefficient n-octanol/water (Log Kow)	> 6 (EU Method A.8, Experimental value)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
trimethoxyvinylsilane (2768-02-7)	
Partition coefficient n-octanol/water (Log Pow)	1,1 (QSAR, KOWWIN, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
Partition coefficient n-octanol/water (Log Pow)	0,6 (Calculated, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Partition coefficient n-octanol/water (Log Pow)	-0,3 (QSAR, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

reaction mass of N, N'-ethane1,2-diylbis(hexanamide) and 12-hydroxy-N-[2-[(1-oxyhexyl)amino]ethyl]octadecanamide and N, N'-ethane-1,2-diylbis(12-hydroxyoctadecan amide)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2,28 – 5,63 (OECD 121, Experimental value)
Ecology - soil	Adsorbs into the soil.

trimethoxyvinylsilane (2768-02-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2,811 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	
Surface tension	32,3 mN/m (20 °C, 30 mg/l, OECD 115: Surface Tension of Aqueous Solutions)

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3,477 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate (52829-07-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
trimethoxyvinylsilane (2768-02-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW, EC 2150/2002)	: 08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09 15 01 02 - plastic packaging

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID /

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	trimethoxyvinylsilane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

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EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	trimethoxyvinylsilane ; dioctylbis(pentane-2,4- dionato-O,O')tin	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals):
dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : < 1 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration

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Abbreviations and acronyms:	
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

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Full text of H- and EUH-statements:	
H361f	Suspected of damaging fertility.
H371	May cause damage to organs.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.