TYTEX ULTRACLEAR MS POLYMER ADHESIVE SEALANT

SECTION 1. IDENTIFICATION OF THE MIXTURE AND THE COMPANY.

1.1 Product Identifier
Product form: Mixture
Trade Name: Tytex Ultraclear

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

1.2.2. Uses advised against
No additional information available

1.3 Details of the Supplier of the Safety Data Sheet

Tytex

Unit F, Dales Manor Business Park, Grove Road, Sawston, Cambridge, CB22 3TJ

T: +44 (0) 1223 755752 E: tech@tytexadhesives.co.uk

1.4 Emergency Telephone Number

Emergency Telephone Number: +44 (0) 1223 755752 (NOT 24HRS)

Working Hours: Weekdays: 8.00 am - 16.30 pm (GMT)

SECTION 2. HAZARDS IDENTIFICATION.

2.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

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

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

CLP Signal word : -

Hazard statements (CLP):	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP):	P273 - Avoid release to the environment.
	P501 - Dispose of contents and container to a hazardous or special waste collection point.
EUH-statements:	EUH208 - Contains trimethoxyvinylsilane, reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene), 3-(2-aminoethylamino) propyltrimethoxysilane, Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, 3-aminopropyltriethoxysilane. May produce an allergic reaction.

2.3 Other Hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

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]
trimethoxyvinylsilane	CAS-No.: 2768-02-7 EC-No.: 220-449-8 EC Index-No.: 014-049-00-0 REACH-no: 01-2119513215-52	≥0.5–<1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Sens. 1B, H317
3-aminopropyltriethoxysilane	CAS-No.: 919-30-2 EC-No.: 213-048-4 EC Index-No.: 612-108-00-0 REACH-no: 01-211948047924	≥0.5–<1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS-No.: 1065336-91-5 EC-No.: 915-687-0 REACH-no: 01-2119491304-40	≥0.5–<1	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly (oxyethylene)	EC-No.: 400-830-7 EC Index-No.: 607-176-00-3 REACH-no: 01-0000015075-76	≥0.1–<0.5	Skin Sens. 1, H317 Aquatic Chronic 2, H411
3-(2-aminoethylamino) propyltrimethoxysilane	CAS-No.: 1760-24-3 EC-No.: 217-164-6 REACH-no: 01-2119970215-39	≥0.1–<0.5	Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
methanol substance with a Community workplace exposure limit	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-211943330744	≥0.1–<0.5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370

Specific concentration limits:

Name	Product identifier	Specific concentration limits
3-(2-aminoethylamino) propyltrimethoxysilane	CAS-No.: 1760-24-3 EC-No.: 217-164-6 REACH-no: 01-2119970215-39	(2.5 ≤C < 100) Eye Irrit. 2, H319 (2.5 ≤C < 100) Skin Sens. 1, H317
methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	(3 ≤C < 10) STOT SE 2, H371 (10 ≤C < 100) STOT SE 1, H370

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

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SECTION 4. FIRST AID MEASURES.

4.1 Description of first aid measures

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation:	Allow affected person to breathe fresh air. Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact:	Not expected to present a significant skin hazard under anticipated conditions of normal use. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact:	If eye irritation persists, consult a specialist. Wash immediately with lots of water (15 minutes)/shower. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects:	Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

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SECTION 5. FIRE-FIGHTING MEASURES.

5.1 Extinguishing media

Suitable extinguishing media: All extinguishing media allowed. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2 Special hazards arising from the mixture

Fire hazard:	Not combustible

5.3 Advice for firefighters

Precautionary measures fire:	Evacuate unnecessary personnel. Exercise caution when fighting any chemical fire. Do not breathe fumes from fires or vapours from decomposition.
Firefighting instructions:	Cool down the containers exposed to heat with a water spray. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting:	[In case of inadequate ventilation] wear respiratory protection. Wear suitable protective clothing, gloves and eye or face protection. Do not enter fire area without proper protective equipment, including respiratory protection.
Other information:	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

General measures:	Wear suitable protective clothing, gloves and eye or face protection. [In case of inadequate ventilation] wear respiratory protection.

6.1.1. For non-emergency personnel

Emergency procedures:	Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment:	Equip cleanup crew with proper protection.
Emergency procedures:	Ventilate area.

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6.2. Environmental precautions

Avoid sub-soil penetration. Do not allow into drains or water courses. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

Concerning disposal elimination after cleaning, see section 13. Concerning personal protective equipment to use, see section 8. See Section 8. Exposure controls and personal protection.

SECTION 7. HANDLING AND STORAGE.

7.1 Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Handling temperature: 5 – 40 °C

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well-ventilated place. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

Maximum storage period: 12 months

Storage temperature: 5–25°C

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

methanol (67-56-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methanol
IOEL TWA	260 mg/m^3
IOEL TWA [ppm]	200 ppm
Remark	Skin
	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	266 mg/m^3
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	333 mg/m^3
WEL STEL (OEL STEL) [ppm]	250 ppm

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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
No additional information available

8.1.5. Control banding
No additional information available

8.2 Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
No special clothing/skin protection equipment is recommended under normal conditions of use

Hand protection:
Time of penetration is to be checked with the glove producer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Wear protective gloves.

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	> 0,35		EN ISo 374

8.2.2.3. Respiratory protection

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Ensure there is adequate ventilation. Wear appropriate mask

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Consumer exposure controls:

Avoid contact with skin and eyes. Wash hands and other exposed areas with soap and water before leaving work.

Other information:

Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke during use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paste
Colour	Transparent. clear.
Odour	characteristic.
Odour threshold	No data available
pH :	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.06 g/ml at 20 °C
Solubility	Water: Insoluble
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2 Other information

No additional information available

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SECTION 10. STABILITY AND REACTIVITY.

10.1. Reactivity
No dangerous reactions known under normal conditions of use.

10.2. Chemical stability
Stable at ambient temperature and under normal conditions of use. Not established.

10.3. Possibility of hazardous reactions
None under normal use. Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
None under normal conditions. fume. Carbon monoxide. Carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects

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

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)

LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 5.8 mg/l/4h (OECD 403 method)

trimethoxyvinylsilane (2768-02-7)

LD50 oral rat	7120 mg/kg
LD50 dermal rabbit	3259 mg/kg
LC50 Inhalation - Rat [ppm]	2773 ppm/4h
LC50 Inhalation - Rat (Vapours)	16.8 mg/l/4h
ATE CLP (oral)	7120 mg/kg bodyweight
ATE CLP (dermal)	3259 mg/kg bodyweight
ATE CLP (gases)	2773 ppmv/4h

methanol (67-56-1)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 oral	1187 – 2769 mg/kg
LD50 dermal rat	300 mg/kg
LD50 dermal rabbit	15800 – 17100 mg/kg
LC50 Inhalation - Rat	128.2 mg/l/4h
LC50 Inhalation - Rat [ppm]	64000 ppm/4h
LC50 Inhalation - Rat (Vapours)	128.2 mg/l/4h
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight

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methanol (67-56-1)

ATE CLP (gases)	700 ppmv/4h

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)

LD50 oral rat	2295 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	1.49 – 2.44 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 1.49 mg/l/4h
ATE CLP (oral)	2295 mg/kg bodyweight

3-aminopropyltriethoxysilane (919-30-2)

LD50 oral rat	2.83 ml/kg male
LC50 Inhalation - Rat [ppm]	> 5 ppm male
ATE CLP (oral)	500 mg/kg bodyweight

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

LD50 oral rat	3230 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), 95% CL: 2615 - 4247
LD50 dermal rat	> 3170 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE CLP (oral)	3230 mg/kg bodyweight

Skin corrosion/irritation	Not classified
Additional information	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Not classified
Additional information	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	Not classified
Additional information	Mixture Raw material
	Does not cause cutaneous sensitisation for guinea-pigs
	(OECD 406 method)
	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Not classified
Additional information	Based on available data, the classification criteria are not met
Carcinogenicity	Not classified
Additional information	Based on available data, the classification criteria are not met

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3-aminopropyltriethoxysilane (919-30-2)

NOAEL (chronic, oral, animal/male, 2 years)	> 43.8 mg/kg bodyweight
Reproductive toxicity	Not classified
Additional information	Based on available data, the classification criteria are not met

methanol (67-56-1)

NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-single exposure	Not classified
Additional information	Based on available data, the classification criteria are not met

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	Not classified
Additional information	Based on available data, the classification criteria are not met

trimethoxyvinylsilane (2768-02-7)

NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)

NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 1545 mg/kg bodyweight Animal: rat

3-aminopropyltriethoxysilane (919-30-2)

LOAEL (oral, rat, 90 days)	600 mg/kg bodyweight/day
NOAEL (subchronic, oral, animal/male, 90 days)	200 mg/kg bodyweight

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))
Aspiration hazard	Not classified
Additional information	Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met

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SECTION 12. ECOLOGICAL INFORMATION.

12.1. Toxicity

Ecology - water	Harmful to aquatic life with long lasting effects
Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Harmful to aquatic life with long lasting effects

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)

LC50 - Fish [1]	2.8 mg/l (OECD 203 method)
EC50 - Crustacea [1]	3.8 mg/l (OECD 202 method)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201 method)

trimethoxyvinylsilane (2768-02-7)

LC50 - Fish [1]	191 mg/l
EC50 - Crustacea [1]	167 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	> 957 mg/l
ErC50 algae	> 100 mg/l (OECD 201 method)
NOEC chronic algae	25 mg/l

methanol (67-56-1)

LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	18260 mg/l (OECD 202 method)
EC50 96h - Algae [1]	= 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

methanol (67-56-1)

EC50 96h - Algae [2]	22000 mg/l Pseudokirchneriella subcapitata
ErC50 algae	16912 mg/l ulva pertusa
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	7900 mg/l Oryzias latipes

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)

LC50 - Fish [1]	597 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	81 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	126 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	352 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	8.8 mg/l (OECD 201 method)
NOEC (chronic)	> 1 mg/l
NOEC chronic algae	3.1 mg/l (OECD 201 method)

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3-aminopropyltriethoxysilane (919-30-2)

LC50 - Fish [1]	> 100 mg/l Brachydanio rerio (zebra-fish)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Big water flea)
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata
NOEC chronic algae	72h 1.3 mg/l Desmodesmus subspicatus.

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

LC50 - Fish [1]	0.9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	1.68 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	0.42 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)

Biodegradation	(OECD 301B method)

methanol (67-56-1)

Persistence and degradability	Readily biodegradable.

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)

Biodegradation	39 % (OECD 301A method)

3-aminopropyltriethoxysilane (919-30-2)

Persistence and degradability	Not readily biodegradable. Hydrolysis in water.

3-aminopropyltriethoxysilane (919-30-2)

Biodegradation	28d 67 % (OECD 301A method)

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

Biodegradation	(OECD 301F method)

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

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reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)

Bioconcentration factor (BCF REACH)	34 (OECD 305 method)
Partition coefficient n-octanol/water (Log Pow)	< -1.3
Partition coefficient n-octanol/water (Log Kow)	(OECD 107 method)

methanol (67-56-1)

Bioconcentration factor (BCF REACH)	< 10
Partition coefficient n-octanol/water (Log Pow)	-0.77
Bioaccumulative potential	Low bioaccumulation potential.

3-aminopropyltriethoxysilane (919-30-2)

Bioconcentration factor (BCF REACH)	3.4 Cyprinus carpio (Common Carp)
Bioaccumulative potential	not bioaccumulative.

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

Partition coefficient n-octanol/water (Log Pow)	2.37 – 2.77 (OECD 107 method)

12.4. Mobility in soil

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)

Surface tension	47.5 mN/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.2

12.5. Results of PBT and vPvB assessment

Component	
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
methanol (67-56-1)	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. Other adverse effects

Additional information:	Avoid release to the environment.

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SECTION 13. DISPOSAL CONSIDERATIONS.

13.1. Waste treatment methods

Regional legislation (waste):	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations:	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials:	Avoid release to the environment.

SECTION 14. TRANSPORT INFORMATION.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es) Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

No supplementary information available

14.6. Special precautions for user

Overland transport	Not applicable
Transport by sea	Not applicable
Air transport	Not applicable
Inland waterway transport	Not applicable
Rail transport	Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

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Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 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

For the following substances of this mixture a chemical safety assessment has been carried out:

methanol

SECTION 16. OTHER INFORMATION.

Indication of changes:

Hazards identification.

Abbreviations and acronyms:

CAS-No.	Chemical Abstract Service number
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
DMEL	Derived Minimal Effect level
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
LC50	Median lethal concentration
IOELV	Indicative Occupational Exposure Limit Value

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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
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative

Data sources: ECHA (European Chemicals Agency). Supplier's safety documents. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. For more information regarding the use of this product, please refer to our technical information or contact the sales department in your region.

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information: None.

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
EUH208	Contains trimethoxyvinylsilane, reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene), 3-(2-aminoethylamino)propyltrimethoxysilane, Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, 3-aminopropyltriethoxysilane. May produce an allergic reaction.

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Full text of H- and EUH-statements:

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H371	May cause damage to organs.
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.
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet (SDS), EU

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.

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