

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 12/18/2023 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : Bijlard TIFA Houtlijm MS-D4 UFI : RU4Q-V01E-U00A-KX6W

Product group : Trade product

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

1.2.1. Relevant identified uses

: Professional use, Industrial use Main use category

: Wood glue / Kit for bonding e.g. window frames Use of the substance/mixture

Title	Life cycle stage	Use descriptors
Bijlard MS Woodbond D4	Industrial, Professional	SU19, PC1, PROC0

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Bijlard International Platinastraat 141 2718 SR Zoetermeer The Netherlands

T+31 (0)79 343 75 38

info@bijlard.com, www.bijlard.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2 H319

Skin sensitisation Not classified

VTMO statement

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



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GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.

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

contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

: EUH208 - Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, trimethoxyvinylsilane;

trimethoxy(vinyl)silane. May produce an allergic reaction.

2.3. Other hazards

EUH-statements

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH 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

Product name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
trimethoxyvinylsilane; trimethoxy(vinyl)silane	CAS-No.: 2768-02-7 EC-No.: 220-449-8 EC Index-No.: 014-049-00-0 REACH-no: 01-2119513215- 52	1 – 5	Skin Sens. 1B, H317
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	CAS-No.: 2530-83-8 EC-No.: 219-784-2 REACH-no: 01-2119513212- 58	1 – 5	Eye Dam. 1, H318 Aquatic Chronic 3, H412
ε-caprolactam substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 105-60-2 EC-No.: 203-313-2 EC Index-No.: 613-069-00-2 REACH-no: 01-2119457029-	1 – 5	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315
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 STOT SE 3, H335 Eye Dam. 1, H318
1,8-diazabicyclo[5.4.0]undec-7-ene	CAS-No.: 6674-22-2 EC-No.: 229-713-7 REACH-no: 01-2119977097- 24	0.1 – 1	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Eye Dam. 1, H318

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. Allow the victim to rest. In all cases of doubt, or

when symptoms persist, seek medical attention.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after eye contact : Causes serious eye irritation.

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

No particular/specific measures required. When in doubt or if symptoms are observed, get medical advice.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water.

Unsuitable extinguishing media : None

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Move undamaged containers from

immediate hazard area if it can be done safely. Exercise caution when fighting any chemical

fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal. Store away from other

materials.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid spilling the product, as this might cause falls. Avoid contact with skin. Provide good

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

Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well-ventilated place. Original packaging. Keep

container closed when not in use. Protect from heat and direct sunlight.

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

c-caprolactam (105-60-2)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	e-Caprolactam, (dust and vapour)	
IOEL TWA	10 mg/m³	
IOEL STEL	40 mg/m³	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	1,6-Hexanolactam	
WEL TWA (OEL TWA)	10 mg/m³ dust and vapour 1 mg/m³ dust only	
WEL STEL (OEL STEL)	20 mg/m³ dust and vapour 3 mg/m³ dust only	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

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

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	5 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	35.3 mg/m³	
Acute - local effects, inhalation	5.36 mg/m³	
Long-term - systemic effects, dermal	5 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	35.3 mg/m³	
Long-term - local effects, inhalation	600 µg/m³	

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N-(3-(trimethoxysilyl)propyl)ethylenediamine	(1760-24-3)	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	17 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	8.7 mg/m³	
Acute - local effects, inhalation	4 mg/m³	
Long-term - systemic effects,oral	2.5 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	8.7 mg/m ³	
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day	
Long-term - local effects, inhalation	100 μg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	62 µg/l	
PNEC aqua (marine water)	620 μg/l	
PNEC aqua (intermittent, freshwater)	620 µg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	220 μg/kg	
PNEC sediment (marine water)	22 μg/kg	
PNEC (Soil)		
PNEC soil	8.5 μg/kg	
PNEC (STP)		
PNEC sewage treatment plant	25 mg/l	
trimethoxyvinylsilane; trimethoxy(vinyl)silane	2 (2768-02-7)	
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	3.9 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	27.6 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	26.9 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	93.4 mg/m³	
Long-term - systemic effects,oral	300 μg/kg dw	
Long-term - systemic effects, inhalation	6.7 mg/m³	
Long-term - systemic effects, dermal	7.8 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	360 μg/l	
PNEC aqua (marine water)	36 μg/l	
PNEC aqua (intermittent, freshwater)	2.4 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	1.3 mg/kg dwt	
PNEC sediment (marine water)	130 μg/kg	
PNEC (Soil)		
PNEC soil	55 μg/kg	
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trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)			
PNEC (STP)			
PNEC sewage treatment plant	110 mg/l		
1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2	1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2)		
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	3 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	10.6 mg/m³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	1.5 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	2.6 mg/m³		
Long-term - systemic effects, dermal	1.5 mg/kg bodyweight/day		
PNEC (Water)			
PNEC aqua (freshwater)	240 µg/l		
PNEC aqua (marine water)	24 μg/l		
PNEC aqua (intermittent, freshwater)	500 μg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	1.46 mg/kg dwt		
PNEC sediment (marine water)	146 µg/kg		
PNEC (Soil)			
PNEC soil	152 µg/kg		
PNEC (STP)			
PNEC sewage treatment plant	13 mg/l		
[3-(2,3-epoxypropoxy)propyl]trimethoxysiland	e (2530-83-8)		
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	21 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	147 mg/m³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	12.5 mg/kg bodyweight/day		
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day		
PNEC (Water)			
PNEC aqua (freshwater)	0.45 mg/l		
PNEC aqua (marine water)	0.045 mg/l		
PNEC aqua (intermittent, freshwater)	0.45 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	1.6 mg/kg dwt		
PNEC sediment (marine water)	0.16 mg/kg dwt		
PNEC (Soil)			
PNEC soil	0.063 mg/kg dwt		

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[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
PNEC (STP)			
PNEC sewage treatment plant	8.2 mg/l		
ε-caprolactam (105-60-2)			
DNEL/DMEL (Workers)			
Acute - local effects, inhalation	10 mg/m³		
Long-term - local effects, inhalation	5 mg/m³		
DNEL/DMEL (General population)			
Acute - local effects, inhalation	5 mg/m³		
Long-term - systemic effects,oral	8.55 mg/kg bodyweight/day		
Long-term - local effects, inhalation	2.5 mg/m³		
PNEC (Water)			
PNEC aqua (freshwater)	2 mg/l		
PNEC aqua (marine water)	0.2 mg/l		
PNEC aqua (intermittent, freshwater)	1 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	18.7 mg/kg dwt		
PNEC sediment (marine water)	1.87 mg/kg dwt		
PNEC (Soil)			
PNEC soil	2.55 mg/kg dwt		
PNEC (STP)			
PNEC sewage treatment plant	1737 mg/l		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide adequate ventilation.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):





8.2.2.1. Eye and face protection

Eye protection:

Wear eye glasses with side protection according to 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

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Hand protection:

Recommendation: Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (>=0.4 mm), butyl rubber (>=0.7 mm) and others. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use. Wash hands before breaks and after work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Not available Appearance : Paste. : Not available Odour Odour threshold : Not available Melting point : Not applicable : Not available Freezing point Boiling point : Not applicable : Not available Flammability Lower explosion limit : Not available Upper explosion limit : Not available Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available : Not applicable Viscosity, kinematic : Not available

Viscosity, dynamic : 100 − 1000 Pa·s @ 22°C

Solubility : Not available
Partition coefficient n-octanol/water (Log Kow) : Not available
Vapour pressure : Not available
Vapour pressure at 50°C : Not available

Density : 1.403 g/cm³ (DIN/ISO 1183-1)

Relative density : Not available
Relative vapour density at 20°C : Not available
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protect against frost. Do not expose to heat.

10.5. Incompatible materials

None under normal conditions.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

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

Acute toxicity (inhalation)	Not classified			
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)				
LD50 oral rat	1897 – 2574 mg/kg			
LD50 dermal rabbit	2000 mg/kg			
LC50 Inhalation - Rat	1.49 – 2.44 mg/l/4h			
ATE oral	1897 mg/kg bodyweight			
ATE dermal	2000 mg/kg bodyweight			
ATE vapours	1.49 mg/l/4h			
ATE dust/mist	1.49 mg/l/4h			
trimethoxyvinylsilane; trimethoxy(vinyl)silane	2 (2768-02-7)			
LD50 oral rat	7.34 – 7.46 ml/kg			
LD50 dermal rabbit	3.36 – 4 ml/kg			
LC50 Inhalation - Rat [ppm]	2773 ppm			
ATE oral	7340 mg/kg bodyweight			
ATE dermal	3360 mg/kg bodyweight			
ATE gases	2773 ppmv/4h			
1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2)				
LD50 oral rat	215 – 681 mg/kg bodyweight			
ATE oral	100 mg/kg bodyweight			
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)				
LD50 oral rat	7.5 ml/kg			
LD50 dermal rabbit	3.97 ml/kg			
LC50 Inhalation - Rat	> 5.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)			
ATE oral	7500 mg/kg bodyweight			

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[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
ATE dermal	3970 mg/kg bodyweight		
ε-caprolactam (105-60-2)			
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: other:		
ATE oral	500 mg/kg bodyweight		
ATE gases	4500 ppmv/4h		
ATE vapours	11 mg/l/4h		
ATE dust/mist	1.5 mg/l/4h		
	Not classified		
Serious eye damage/irritation :	pH: Not applicable Causes serious eye irritation. pH: Not applicable		
Respiratory or skin sensitisation :	Skin sensitization: Not classified (VTMO statement).		
Germ cell mutagenicity :	Not classified		
	Not classified Not classified		
trimethoxyvinylsilane; trimethoxy(vinyl)silane	(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)		
STOT-single exposure :	Not classified		
N-(3-(trimethoxysilyl)propyl)ethylenediamine	(1760-24-3)		
STOT-single exposure	May cause respiratory irritation.		
ε-caprolactam (105-60-2)			
STOT-single exposure	May cause respiratory irritation.		
STOT-repeated exposure :	Not classified		
N-(3-(trimethoxysilyl)propyl)ethylenediamine	(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		
trimethoxyvinylsilane; trimethoxy(vinyl)silane	(2768-02-7)		
LOAEL (oral, rat, 90 days)	62.5 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)		
NOAEL (oral, rat, 90 days)	< 62.5 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:		

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ε-caprolactam (105-60-2)		
NOAEL (oral, rat, 90 days)	29 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Aspiration hazard :	Not classified	
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
Viscosity, kinematic 3.1 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)' 1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2)		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)		
Viscosity, kinematic	3.43 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
LC50 - Fish [1]	597 mg/l	

EC50 - Crustacea [1]	81 mg/l
EC50 72h - Algae [1]	11 mg/l
EC50 72h - Algae [2]	352 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

trimethoxyvinyishane, trimethoxy(vinyi)shane (2700-02-7)	
LC50 - Fish [1]	191 mg/l
EC50 - Crustacea [1]	168.7 mg/l
EC50 72h - Algae [1]	89 mg/l

1,8-diazabicyclo[5.4.0]	undec-7-ene	(6674-22-2)
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LC50 - Fish [1]	100 – 220 mg/l
EC50 - Crustacea [1]	50 mg/l
EC50 72h - Algae [1]	100 mg/l

(2530-83-8)	
LC50 - Fish [1]	55 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	324 mg/l
EC50 72h - Algae [1]	119 – 268 mg/l
EC50 96h - Algae [1]	350 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	250 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

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[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)		
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
ε-caprolactam (105-60-2)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes	
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

12.2. Persistence and degradability

Bijlard MS Woodbond D4	
Persistence and degradability	Rapidly degradable
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Persistence and degradability	Rapidly degradable
trimethoxyvinylsilane; trimethoxy(vinyl)silane (2768-02-7)	
Persistence and degradability Rapidly degradable	
1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2)	
Persistence and degradability	Rapidly degradable
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) Persistence and degradability Rapidly degradable	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)	
Partition coefficient n-octanol/water (Log Pow) -40.3 @ 20 °C / pH 2 - 9	
1,8-diazabicyclo[5.4.0]undec-7-ene (6674-22-2)	
Partition coefficient n-octanol/water (Log Pow) -2.2 - 2.7 @ 25 °C / pH 7 - 12.4	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecological information : Avoid release to the environment.

European List of Waste (LoW, EC 2150/2002) : 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
Not regulated for transport				
14.2. UN proper shippin	g name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o	14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group	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

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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(b)	Bijlard MS Woodbond D4; N-(3- (trimethoxysilyl)propyl)eth ylenediamine; trimethoxyvinylsilane; trimethoxy(vinyl)silane; trimethoxy(vinyl)silane; 1,8- diazabicyclo[5.4.0]undec- 7-ene; [3-(2,3- epoxypropoxy)propyl]trim ethoxysilane	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
3(c)	[3-(2,3- epoxypropoxy)propyl]trim ethoxysilane	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 class 4.1

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 no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

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 additional information available

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SECTION 16: Other information

Abbreviations and	d 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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
ED	Endocrine disrupting properties	
EC-No.	European Community number	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
IOELV	Indicative Occupational Exposure Limit Value	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
N.O.S.	Not Otherwise Specified	
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	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
STP	Sewage treatment plant	
TLM	Median Tolerance Limit	
TRGS	Technical Rules for Hazardous Substances	
ThOD	Theoretical oxygen demand (ThOD)	
SDS	Safety Data Sheet	

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Abbreviations and acronyms:		
VOC Volatile Organic Compounds		
WGK	Water Hazard Class	
vPvB Very Persistent and Very Bioaccumulative		

Other information

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:			
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3		
EUH208	Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, trimethoxyvinylsilane; trimethoxy(vinyl)silane. May produce an allergic reaction.		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
H301	Toxic if swallowed.		
H302	Harmful if swallowed.		
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.		
H332	Harmful if inhaled.		
H335	May cause respiratory irritation.		
H412	Harmful to aquatic life with long lasting effects.		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1B	Skin sensitisation, category 1B		
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation		

Full text of use descriptors		
PC1	Adhesives, sealants	
PROC0	Other	
SU19	Building and construction work	

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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:				
Eye Irrit. 2	H319	Calculation method		
Skin Sens. Not classified		Expert judgement		

The classification complies with : ATP 12

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.