

## SAFETY DATA SHEET

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE

**1.1 Product Identifier**

Product form : Mixture  
Trade name : Siloxa LMN

**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**

Siloxa Building Chemicals  
The Office  
Three Pillars Business Park  
Sutton-in-the-Isle  
Cambridgeshire  
CB6 2RU

**1.4** Emergency telephone number:  
07970287971

## SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture**

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

Contains 3-aminopropyltriethoxysilane, 3-(2-aminoethylamino)propyltrimethoxysilane, trimethoxyvinylsilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine. EUH208

May produce an allergic reaction.

Safety data sheet available on request. EUH210

Full text of H- and EUH-statements: see section 1.6

**Adverse physicochemical, human health and environmental effects**

No additional information available

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

EUH-statements: EUH208 - Contains 3-aminopropyltriethoxysilane, 3-(2-aminoethylamino)propyltrimethoxysilane, trimethoxyvinylsilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine.  
May produce an allergic reaction.

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

| Component   |  |
|---|--|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | trimethoxyvinylsilane (2768-02-7), N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | trimethoxyvinylsilane (2768-02-7), N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1) |

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 substance(s) are 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]  |
|--|---|--------------------|--|
| Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, <2% aromatics | EC-No.: 919-029-3<br>REACH-no: 01-2119457735-29   | $\geq 10 - < 25$   | Asp. Tox. 1, H304  |
| 3-aminopropyltriethoxysilane   | CAS-No.: 919-30-2<br>EC-No.: 213-048-4<br>EC Index-No.: 612-108-00-0<br>REACH-no: 01-2119480479-24  | $\geq 0,5 - < 1$   | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)<br>Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 |
| trimethoxyvinylsilane  | CAS-No.: 2768-02-7<br>EC-No.: 220-449-8<br>EC Index-No.: 014-049-00-0<br>REACH-no: 01-2119513215-52 | $\geq 0,5 - < 1$   | Flam. Liq. 3, H226<br>Acute Tox. 4 (Inhalation:vapour), H332 (ATE=16,8 mg/l/4h)<br>Skin Sens. 1B, H317           |
| 3-(2-aminoethylamino)propyltrimethoxysilane                          | CAS-No.: 1760-24-3<br>EC-No.: 217-164-6<br>REACH-no: 01-2119970215-39                               | $\geq 0,5 - < 1$   | Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 3, H335   |
| N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine       | CAS-No.: 35141-30-1<br>EC-No.: 252-390-9<br>REACH-no: 01-2120770264-55                              | $\geq 0,1 - < 0,5$ | Acute Tox. 4 (Inhalation), H332 (ATE=1,49 mg/l/4h)<br>Eye Dam. 1, H318 Skin Sens. 1A, H317                       |

| Specific concentration limits:                                 |  |                                    |
|--|--|------------------------------------|
| Name   | Product identifier   | Specific concentration limits (%)  |
| 3-(2-aminoethylamino)propyltrimethoxysilane                    | CAS-No.: 1760-24-3<br>EC-No.: 217-164-6<br>REACH-no: 01-2119970215-39  | (2,5 ≤ C < 3) Eye Irrit. 2; H319   |
| N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine | CAS-No.: 35141-30-1<br>EC-No.: 252-390-9<br>REACH-no: 01-2120770264-55 | (2,5 ≤ C < 100) Skin Sens. 1; H317 |

## 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.   |
| 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.                 |
| First-aid measures after eye contact  | :Rinse immediately with plenty of water. 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 | :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

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

|                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : 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 substance or mixture

|                    |                           |
|--------------------|---------------------------|
| Explosion hazard : | Product is not explosive. |
|--------------------|---------------------------|

### 5.3 Advice for firefighters

|                                |   |
|--------------------------------|---|
| Firefighting instructions      | : 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 | : 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 : 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 personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13

# SECTION 7: HANDLING AND STORAGE

## 7.1 Precautions for safe handling

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.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : 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.

## 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

No additional information available

### 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

### 8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Do not breathe vapours. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes.

Good ventilation of the workplace required.

### 8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



#### 8.2.2.1 Eye and face protection

Eye protection

Chemical goggles or safety glasses

#### 8.2.2.2. Skin protection

Hand protection

Wear protective gloves.

#### 8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

#### 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.

## SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|   |  |
|---|--|
| Physical state                                  | : Liquid   |
| Colour  | : Colourless.  |
| Appearance                                      | : Paste.   |
| Odour   | : characteristic.                                    |
| Odour threshold                                 | : Not available                                      |
| Melting point                                   | : Not applicable                                     |
| Freezing point                                  | : Not applicable                                     |
| Softening point                                 | : Not applicable                                     |
| Boiling point                                   | : Not applicable                                     |
| Flammability                                    | : Not available                                      |
| Explosive properties                            | : Product is not explosive.                          |
| Oxidising properties                            | : Non oxidizing material according to EC criteria.   |
| Lower explosion limit                           | : Not applicable                                     |
| Upper explosion limit                           | : Not applicable                                     |
| Flash point                                     | : > 60 °C Hydrolysis products reduce the flash point |
| Auto-ignition temperature                       | : > 235 °C (calculated value)                        |
| Decomposition temperature                       | : Not available                                      |
| pH  | : insoluble in water                                 |
| Viscosity, kinematic                            | : > 10309,278 mm <sup>2</sup> /s                     |
| Viscosity, dynamic                              | : > 10000 mPa · s (Brookfield spindle 96, 1 rpm)     |
| Non-Newtonian liquid                            | : Thixotropic behaviour                              |
| Solubility                                      | : Water: Insoluble                                   |
| Partition coefficient n-octanol/water (Log Kow) | : Not applicable for preparations                    |
| Vapour pressure                                 | : Does not apply                                     |
| Vapour pressure at 50°C                         | : Not applicable.                                    |
| Density   | : 0,97 g/cm <sup>3</sup>                             |
| Relative density                                | : 0,97   |
| Relative vapour density at 20°C                 | : Not available                                      |
| Particle characteristics                        | : Not applicable                                     |

|                                     |            |
|-------------------------------------|------------|
| <b>3-aminopropyltriethoxysilane</b> |            |
| Vapour pressure                     | 1,7 – 2 Pa |

  

|  |                              |
|--|------------------------------|
| <b>3-(2-aminoethylamino)propyltrimethoxysilane</b> |                              |
| Boiling point                                      | 140 °C                       |
| Flash point  | 120 °C Atm. press.: 1013 hPa |
| Vapour pressure                                    | 0,4 Pa at 20 °C              |

  

|                              |          |
|------------------------------|----------|
| <b>trimethoxyvinylsilane</b> |          |
| Boiling point                | 123 °C   |
| Flash point                  | 24,5 °C  |
| Auto-ignition temperature    | 235 °C   |
| Vapour pressure              | 11,9 hPa |

  

|  |              |
|--|--------------|
| <b>Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b> |              |
| Boiling point  | 260 – 340 °C |
| Flash point  | 125 – 137 °C |
| Auto-ignition temperature  | 200 – 223 °C |
| Vapour pressure  | 1 hPa(a)     |

  

|   |                               |
|---|-------------------------------|
| <b>N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine</b> |                               |
| Boiling point   | 294 °C Atm. press.: 101,3 kPa |
| Flash point   | 96 °C Atm. press.: 1013 hPa   |
| Vapour pressure   | 0,015 Pa Temp.: 25 °C         |

## 9.2 Information with regard to physical hazard classes

No additional information available

### 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 RELIABILITY

### 10.1 Reactivity

No additional information available

### 10.2 Chemical stability

Not established.

### 10.3 Possibility of hazardous reactions

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**  
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

|  |  |
|--|--|
| <b>3-aminopropyltriethoxysilane (919-30-2)</b>                                 |  |
| LD50 oral rat  | 2,83 ml/kg male  |
| LC50 Inhalation - Rat [ppm]  | > 5 ppm male   |
| <b>3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)</b>                 |  |
| 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), Remarks on results: other:                              |
| 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) |
| <b>trimethoxyvinylsilane (2768-02-7)</b>                                       |  |
| LD50 oral rat  | 7236 mg/kg   |
| LD50 dermal rabbit   | 3880 mg/kg   |
| LC50 Inhalation - Rat [ppm]  | 2773 ppm/4h  |
| LC50 Inhalation - Rat (Vapours)  | 16,8 mg/l/4h   |
| <b>Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b> |  |
| LD50 oral rat  | 5000 mg/kg   |
| LC50 Inhalation - Rat  | 5266 – 5991 mg/l   |

|  |  |
|--|--|
| <b>N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)</b> |  |
| LD50 oral rat  | > 2000 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   |

Skin corrosion/irritation : Not classified  
pH: insoluble in water  
Additional information : Based on available data, the classification criteria are not met

|                                   |  |
|-----------------------------------|--|
| Serious eye damage/irritation     | : Not classified   |
| pH                                | : insoluble in water   |
| Additional information            | : Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified ((OECD 406 method))                               |
| Additional information            | : Does not cause cutaneous sensitisation for guinea-pigs           |
|                                   | Conclusion by analogy  |
|                                   | 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 |

### 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 |
| STOT-single exposure   | : Not classified   |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-repeated exposure | : Not classified   |
| Additional information | : Based on available data, the classification criteria are not met |

### 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 |
|--|----------------------|

### 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 |
|-------------------------------------|-------------------------------------|

### trimethoxyvinylsilane (2768-02-7)

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

### N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)

|                            |   |
|----------------------------|---|
| 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) |
|----------------------------|---|

|                        |  |
|------------------------|--|
| Aspiration hazard      | : Not classified   |
| Additional information | : Based on available data, the classification criteria are not met |

### Siloxa LMN

|                      |                                |
|----------------------|--------------------------------|
| Viscosity, kinematic | > 10309,278 mm <sup>2</sup> /s |
|----------------------|--------------------------------|

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

|                      |   |
|----------------------|---|
| Viscosity, kinematic | 3,1 mm <sup>2</sup> /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm <sup>2</sup> /s)' |
|----------------------|---|

### trimethoxyvinylsilane (2768-02-7)

|                      |                          |
|----------------------|--------------------------|
| Viscosity, kinematic | 1,031 mm <sup>2</sup> /s |
|----------------------|--------------------------|



|  |                               |
|--|-------------------------------|
| <b>Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b> |                               |
| Viscosity, kinematic   | 6,4 – 7,96 mm <sup>2</sup> /s |

## 11.2 Information on other hazards

### 11.2.1. Endocrine disrupting properties

No additional information available

### 11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria not met

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

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

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

|  |   |
|--|---|
| <b>3-aminopropyltriethoxysilane (919-30-2)</b>                                 |   |
| 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.   |
| <b>3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)</b>                 |   |
| 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) |
| <b>trimethoxyvinylsilane (2768-02-7)</b>                                       |   |
| 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 crustacea   | 28,1 mg/l   |
| <b>trimethoxyvinylsilane (2768-02-7)</b>                                       |   |
| NOEC chronic algae   | 25 mg/l   |
| <b>Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b> |   |
| LC50 - Fish [1]  | 1028 – 87556 g/l  |
| EC50 - Crustacea [1]   | 1 – 3193 g/l  |
| EC50 72h - Algae [1]   | 1 – 10 mg/l   |
| NOEC chronic fish  | 1 g/l   |

|  |   |
|--|---|
| NOEC chronic crustacea   | 5 mg/l  |
| <b>N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)</b> |   |
| 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]   | 352 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 72h - Algae [2]   | 126 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| NOEC chronic crustacea   | > 1 mg/l (OECD 211 method)  |

## 12.2 Persistence and degradability

|  |   |
|--|---|
| <b>Siloxa LMN</b>  |   |
| Persistence and degradability  | Not established.                                |
| <b>3-aminopropyltriethoxysilane (919-30-2)</b>                                     |   |
| Persistence and degradability  | Not readily biodegradable, Hydrolysis in water. |
| Biodegradation   | 28d 67 % (OECD 301A method)                     |
| <b>3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)</b>                     |   |
| Persistence and degradability  | Not rapidly degradable                          |
| <b>trimethoxyvinylsilane (2768-02-7)</b>   |   |
| Persistence and degradability  | Rapidly degradable                              |
| Biodegradation   | 51 %  |
| <b>Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b>     |   |
| Persistence and degradability  | Not rapidly degradable                          |
| <b>N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)</b> |   |
| Persistence and degradability  | Rapidly degradable                              |

## 12.3. Bioaccumulative potential

|   |                                   |
|---|-----------------------------------|
| <b>Siloxa LMN</b>                               |                                   |
| Partition coefficient n-octanol/water (Log Pow) | Not applicable for preparations   |
| Partition coefficient n-octanol/water (Log Kow) | Not applicable for preparations   |
| Bioaccumulative potential                       | Not established.                  |
| <b>3-aminopropyltriethoxysilane (919-30-2)</b>  |                                   |
| Bioconcentration factor (BCF REACH)             | 3,4 Cyprinus carpio (Common Carp) |
| Bioaccumulative potential                       | not bioaccumulative.              |

## 12.4 Mobility in soil

No additional information available

## 12.5 Results of PBT and vPvB assessment

| Component   |  |
|---|--|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | trimethoxyvinylsilane (2768-02-7), N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | trimethoxyvinylsilane (2768-02-7), N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1) |

## 12.6 Endocrine disrupting properties

Adverse effects on the environment caused

by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

## 12.7 Other adverse effects

Additional information : Avoid release to the environment.

# SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

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

Recommendations

Ecological waste information : Avoid release to the environment.

# SECTION 14: TRANSPORT INFORMATION

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

| ADR                                     | IMDG           | IATA           | ADN            | RID            |
|---|----------------|----------------|----------------|----------------|
| <b>14.1. UN number or ID number</b>     |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.2. UN proper shipping name</b>    |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.4. Packing group</b>              |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.5. Environmental hazards</b>      |                |                |                |                |
| 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 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)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### **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 2024/590 on substances that deplete the ozone layer)

##### **Council Regulation (EC) for the control of dual-use items**

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

##### **Explosives Precursors Regulation (EU 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 (EC 273/2004)**

Contains 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

##### **Germany**

##### **Air Quality Control (TA Luft)**

| Category | Class | Applicable on | Local name | Max. mass flow | Max. mass concentration |
|----------|-------|---------------|------------|----------------|-------------------------|
|          |       |               |            |                |                         |

#### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out

| 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               |
| 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  |
| EC-No.                      | European Community number   |
| EN                          | European Standard   |
| 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  |
| NOAEC                       | No-Observed Adverse Effect Concentration  |
| NOAEL                       | No-Observed Adverse Effect Level  |
| OECD                        | Organisation for Economic Co-operation and Development  |
| NOEC                        | No-Observed Effect Concentration  |
| 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 |
| SDS                         | Safety Data Sheet   |
| vPvB                        | Very Persistent and Very Bioaccumulative  |
| VOC                         | Volatile Organic Compounds  |

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.

Training advice

: Normal use of this product shall imply use in accordance with the instruction on the packaging.

Other information

: None.

| Full text of H- and EUH-statements: |  |
|-------------------------------------|--|
| Acute Tox. 4 (Inhalation)           | Acute toxicity (inhal.), Category 4  |
| Acute Tox. 4 (Inhalation:vapour)    | Acute toxicity (inhalation:vapour) Category 4  |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4  |
| Asp. Tox. 1                         | Aspiration hazard, Category 1  |
| EUH210                              | Safety data sheet available on request.  |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1  |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |
| 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 3                           | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation   |
| H226                                | Flammable liquid and vapour.   |
| H302                                | Harmful if swallowed.  |
| H304                                | May be fatal if swallowed and enters airways.  |
| H314                                | Causes severe skin burns and eye damage.   |
| 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.  |
| EUH208                              | Contains 3-aminopropyltriethoxysilane, 3-(2-aminoethylamino)propyltrimethoxysilane, trimethoxyvinylsilane, N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine. May produce an allergic reaction. |

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

|        |        |                    |
|--------|--------|--------------------|
| EUH208 | EUH208 | Calculation method |
| EUH210 | EUH210 | Calculation method |

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.