## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**1.1 Product identifier:** RK Fix & Seal

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

Relevant uses: Adhesives and/or sealants

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

Rakennuskemia Oy
Kerkkolankatu 17
05800 Hyvinkää - Finland
Phone.: +358 19 4574400
info@rakennuskemia.com
www.rakennuskemia.com

**1.4 Emergency telephone number:** Emergency: 112. Poison information center Helsinki, open 24 h/day+358 9 471 977 (direct); +358 9 4711 (central)

## SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture:**

**CLP Regulation (EC) No 1272/2008:**

The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

**Hazard statements:**

Non-applicable

**Precautionary statements:**

Non-applicable

**Supplementary information:**

EUH208: Contains 1,2-Ethanediamine, N-[3-(dimethoxymethylsil, Dioctylbis(pentane-2,4-dionato-O,O´)tin, N-(3-(trimethoxysilyl) propyl)ethylenediamine. May produce an allergic reaction
EUH210: Safety data sheet available on request

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria
Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | | Concentration |
|---|---|---|---|
| CAS: 2768-02-7<br>EC: 220-449-8<br>Index: Non-applicable<br>REACH: 01-2119513215-52-XXXX | **Trimethoxyvinylsilane[1]** | Self-classified | **1 - <2,5 %** |
| | Regulation 1272/2008 | Acute Tox. 4: H332; Flam. Liq. 3: H226 - Warning  | |
| CAS: 1760-24-3<br>EC: 217-164-6<br>Index: Non-applicable<br>REACH: 01-2119970215-39-XXXX | **N-(3-(trimethoxysilyl)propyl)ethylenediamine[1]** | Self-classified | **0,1 - <1 %** |
| | Regulation 1272/2008 | Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger  | |

[1] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

- CONTINUED ON NEXT PAGE -

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

| Identification | Chemical name/Classification | | Concentration |
|---|---|---|---|
| CAS: 54068-28-9<br>EC: 483-270-6<br>Index: Non-applicable<br>REACH: 01-0000020199-67-XXXX | **Dioctylbis(pentane-2,4-dionato-O,O´)tin(1)** Self-classified | | **0,1 - <1 %** |
| | Regulation 1272/2008 | Skin Sens. 1: H317; STOT RE 2: H373; STOT SE 2: H371 - Warning  | |
| CAS: 3069-29-2<br>EC: 221-336-6<br>Index: Non-applicable<br>REACH: 01-2119963926-21-XXXX | **1,2-Ethanediamine, N-[3-(dimethoxymethylsil(1)** Self-classified | | **0,1 - <1 %** |
| | Regulation 1272/2008 | Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Danger  | |

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

- CONTINUED ON NEXT PAGE -

## SECTION 5: FIREFIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

**6.4 Reference to other sections:**

See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

**DNEL (Workers):**

- CONTINUED ON NEXT PAGE -

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|---|---|---|---|---|---|
| | | Systemic | Local | Systemic | Local |
| Trimethoxyvinylsilane | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 2768-02-7 | Dermal | Non-applicable | Non-applicable | 0,69 mg/kg | Non-applicable |
| EC: 220-449-8 | Inhalation | Non-applicable | Non-applicable | 4,9 mg/m³ | Non-applicable |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 1760-24-3 | Dermal | 5 mg/kg | Non-applicable | 5 mg/kg | Non-applicable |
| EC: 217-164-6 | Inhalation | Non-applicable | Non-applicable | 35,3 mg/m³ | Non-applicable |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 3069-29-2 | Dermal | 1,7 mg/kg | Non-applicable | 1,7 mg/kg | Non-applicable |
| EC: 221-336-6 | Inhalation | 12 mg/m³ | Non-applicable | 12 mg/m³ | Non-applicable |

**DNEL (General population):**

| Identification | | Short exposure | | Long exposure | |
|---|---|---|---|---|---|
| | | Systemic | Local | Systemic | Local |
| Trimethoxyvinylsilane | Oral | Non-applicable | Non-applicable | 0,3 mg/kg | Non-applicable |
| CAS: 2768-02-7 | Dermal | 26,9 mg/kg | Non-applicable | 0,3 mg/kg | Non-applicable |
| EC: 220-449-8 | Inhalation | 93,4 mg/m³ | Non-applicable | 1,04 mg/m³ | Non-applicable |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | Oral | Non-applicable | Non-applicable | 2,5 mg/kg | Non-applicable |
| CAS: 1760-24-3 | Dermal | 17 mg/kg | Non-applicable | 2,5 mg/kg | Non-applicable |
| EC: 217-164-6 | Inhalation | Non-applicable | Non-applicable | 8,7 mg/m³ | Non-applicable |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | Oral | 0,83 mg/kg | Non-applicable | 0,83 mg/kg | Non-applicable |
| CAS: 3069-29-2 | Dermal | 0,83 mg/kg | Non-applicable | 0,83 mg/kg | Non-applicable |
| EC: 221-336-6 | Inhalation | 2,9 mg/m³ | Non-applicable | 2,9 mg/m³ | Non-applicable |

**PNEC:**

| Identification | | | | |
|---|---|---|---|---|
| Trimethoxyvinylsilane | STP | 110 mg/L | Fresh water | 0,34 mg/L |
| CAS: 2768-02-7 | Soil | 0,052 mg/kg | Marine water | 0,034 mg/L |
| EC: 220-449-8 | Intermittent | 3,4 mg/L | Sediment (Fresh water) | 1,24 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,12 mg/kg |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | STP | 25 mg/L | Fresh water | 0,062 mg/L |
| CAS: 1760-24-3 | Soil | 0,0085 mg/kg | Marine water | 0,0062 mg/L |
| EC: 217-164-6 | Intermittent | 0,62 mg/L | Sediment (Fresh water) | 0,22 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,022 mg/kg |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | STP | 25 mg/L | Fresh water | 0,062 mg/L |
| CAS: 3069-29-2 | Soil | 0,01 mg/kg | Marine water | 0,0062 mg/L |
| EC: 221-336-6 | Intermittent | 0,62 mg/L | Sediment (Fresh water) | 0,24 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,024 mg/kg |

**8.2 Exposure controls:**

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

- CONTINUED ON NEXT PAGE -

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory hand protection | Protective gloves against minor risks | CE CAT I | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+ A1:2009 and EN ISO 374-1:2016 |

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. | CE CAT II | EN 166:2001<br>EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
| | Work clothing | CE CAT I | | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |
| | Anti-slip work shoes | CE CAT II | EN ISO 20347:2012 | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007 |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|---|---|
|  Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---|---|
| V.O.C. (Supply): | 0,99 % weight |
| V.O.C. density at 20 ºC: | 10,2 kg/m³ (10,2 g/L) |
| Average carbon number: | 8 |
| Average molecular weight: | 206,4 g/mol |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

| | |
|---|---|
| Physical state at 20 ºC: | Solid |
| Appearance: | Not available |
| Colour: | Not available |

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

| | |
|---|---|
| Odour: | Not available |
| Odour threshold: | Non-applicable * |
| **Volatility:** | |
| Boiling point at atmospheric pressure: | Non-applicable * |
| Vapour pressure at 20 ºC: | Non-applicable * |
| Vapour pressure at 50 ºC: | Non-applicable * |
| Evaporation rate at 20 ºC: | Non-applicable * |
| **Product description:** | |
| Density at 20 ºC: | 1030,7 kg/m³ |
| Relative density at 20 ºC: | 1,031 |
| Dynamic viscosity at 20 ºC: | Non-applicable * |
| Kinematic viscosity at 20 ºC: | Non-applicable * |
| Kinematic viscosity at 40 ºC: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 ºC: | Non-applicable * |
| Partition coefficient n-octanol/water 20 ºC: | Non-applicable * |
| Solubility in water at 20 ºC: | Non-applicable * |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |
| **Flammability:** | |
| Flash Point: | Non-applicable |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 280 ºC |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |
| **Explosive:** | |
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |

**9.2 Other information:**

| | |
|---|---|
| Surface tension at 20 ºC: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

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## SECTION 10: STABILITY AND REACTIVITY (continued)

### 10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|---|---|---|---|---|
| Not applicable | Not applicable | Precaution | Precaution | Not applicable |

### 10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|---|---|---|---|---|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous as a result of a single exposure. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- CONTINUED ON NEXT PAGE -

## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification | Acute toxicity | | Genus |
|---|---|---|---|
| Trimethoxyvinylsilane | LD50 oral | 7236 mg/kg | Rat |
| CAS: 2768-02-7 | LD50 dermal | 3880 mg/kg (ATEi) | Rabbit |
| EC: 220-449-8 | LC50 inhalation | 1,5 mg/L (4 h) (ATEi) | |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | LD50 oral | 2413 mg/kg | Rat |
| CAS: 1760-24-3 | LD50 dermal | >2000 mg/kg | |
| EC: 217-164-6 | LC50 inhalation | >20 mg/L | |
| Dioctylbis(pentane-2,4-dionato-O,O´)tin | LD50 oral | 2500 mg/kg | Rat |
| CAS: 54068-28-9 | LD50 dermal | >2000 mg/kg | |
| EC: 483-270-6 | LC50 inhalation | >20 mg/L | |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | LD50 oral | 500 mg/kg | Rat |
| CAS: 3069-29-2 | LD50 dermal | >2000 mg/kg | |
| EC: 221-336-6 | LC50 inhalation | >20 mg/L | |

## SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

| Identification | Acute toxicity | | Species | Genus |
|---|---|---|---|---|
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | LC50 | 597 mg/L (96 h) | Brachydanio rerio | Fish |
| CAS: 1760-24-3 | EC50 | 81 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: 217-164-6 | EC50 | 8.8 mg/L (72 h) | Selenastrum capricornutum | Algae |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | LC50 | 597 mg/L (96 h) | Brachydanio rerio | Fish |
| CAS: 3069-29-2 | EC50 | Non-applicable | | |
| EC: 221-336-6 | EC50 | Non-applicable | | |

**12.2 Persistence and degradability:**

| Identification | Degradability | | Biodegradability | |
|---|---|---|---|---|
| Trimethoxyvinylsilane | BOD5 | Non-applicable | Concentration | 104 mg/L |
| CAS: 2768-02-7 | COD | Non-applicable | Period | 28 days |
| EC: 220-449-8 | BOD5/COD | Non-applicable | % Biodegradable | 51 % |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | BOD5 | Non-applicable | Concentration | Non-applicable |
| CAS: 1760-24-3 | COD | Non-applicable | Period | 28 days |
| EC: 217-164-6 | BOD5/COD | Non-applicable | % Biodegradable | 39 % |
| Dioctylbis(pentane-2,4-dionato-O,O´)tin | BOD5 | Non-applicable | Concentration | 102 mg/L |
| CAS: 54068-28-9 | COD | Non-applicable | Period | 28 days |
| EC: 483-270-6 | BOD5/COD | Non-applicable | % Biodegradable | 9 % |
| 1,2-Ethanediamine, N-[3-(dimethoxymethylsil | BOD5 | Non-applicable | Concentration | 11 mg/L |
| CAS: 3069-29-2 | COD | Non-applicable | Period | 28 days |
| EC: 221-336-6 | BOD5/COD | Non-applicable | % Biodegradable | 39 % |

**12.3 Bioaccumulative potential:**

Not available

- CONTINUED ON NEXT PAGE -

## SECTION 12: ECOLOGICAL INFORMATION (continued)

**12.4 Mobility in soil:**

| Identification | Absorption/desorption | | Volatility | |
|---|---|---|---|---|
| Dioctylbis(pentane-2,4-dionato-O,O´)tin | Koc | 5.19 | Henry | 0E+0 Pa·m³/mol |
| CAS: 54068-28-9 | Conclusion | Very High | Dry soil | Yes |
| EC: 483-270-6 | Surface tension | Non-applicable | Moist soil | Yes |

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|---|---|---|
| 08 04 10 | waste adhesives and sealants other than those mentioned in 08 04 09 | Non dangerous |

**Type of waste (Regulation (EU) No 1357/2014):**

Non-applicable

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

## SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Non-applicable

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

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## SECTION 15: REGULATORY INFORMATION (continued)

Contains Dioctylbis(pentane-2,4-dionato-O,O´)tin. Dioctyltin (DOT) compounds shall not be used after 1 January 2012 in the following articles for supply to, or use by, the general public, where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin: — textile articles intended to come into contact with the skin, — gloves, — footwear or part of footwear intended to come into contact with the skin, — wall and floor coverings, — childcare articles, — female hygiene products, — nappies, — two-component room temperature vulcani- sation moulding kits (RTV-2 moulding kits). Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is acting as biocide in free association paint. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture acts as biocide to prevent the fouling by micro-organisms, plants or animals of: (a) all craft irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes; (b) cages, floats, nets and any other appliances or equipment used for fish or shellfish farming; (c) any totally or partly submerged appliance or equipment. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

Non-applicable

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 4: H302 - Harmful if swallowed
Acute Tox. 4: H332 - Harmful if inhaled
Eye Dam. 1: H318 - Causes serious eye damage
Flam. Liq. 3: H226 - Flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1: H317 - May cause an allergic skin reaction
Skin Sens. 1A: H317 - May cause an allergic skin reaction
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Dermal)
STOT SE 2: H371 - May cause damage to organs (Inhalation)

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

http://echa.europa.eu
http://eur-lex.europa.eu

**Abbreviations and acronyms:**

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## SECTION 16: OTHER INFORMATION (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -