



## Safety Data Sheet according to (EC) No 1907/2006 as amended

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TEROSON MS 9399 Part A

SDS No. : 657891  
V004.0

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

#### 1.1. Product identifier

TEROSON MS 9399 Part A

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

Intended use:

MS Adhesive

#### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or [www.henkel-adhesives.com](http://www.henkel-adhesives.com).

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: [technical.services@henkel.co.uk](mailto:technical.services@henkel.co.uk)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (CLP):

|| Serious eye irritation

Category 2

|| H319 Causes serious eye irritation.

#### 2.2. Label elements

##### Label elements (CLP):

|| Hazard pictogram:



|| Signal word:

Warning

**Hazard statement:** H319 Causes serious eye irritation.

**Supplemental information** Contains: Dibutoxydibutylstannane May produce an allergic reaction.

**Precautionary statement:** P280 Wear eye protection.  
**Prevention**

### 2.3. Other hazards

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Following substances are present in a concentration  $\geq 0,1\%$  and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration  $\geq$  the concentration limit that are assessed to be a PBT, vPvB or ED.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Declaration of the ingredients according to CLP (EC) No 1272/2008:

| Hazardous components<br>CAS-No.<br>EC Number<br>REACH-Reg No.                                | Concentration | Classification  | Specific Conc. Limits, M-factors and ATEs  | Add. Information |
|--|---------------|---|--|------------------|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0                  | 1 - < 3 %     | Eye Dam. 1, H318<br>Aquatic Chronic 3, H412   | inhalation:ATE = 12,5 mg/l;dust/mist   |                  |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9<br>258-207-9<br>01-2119537297-32 | 0,1 - < 1 %   | Repr. 2, H361f<br>Eye Dam. 1, H318<br>Aquatic Chronic 2, H411<br>Aquatic Acute 1, H400  | M acute = 1  |                  |
| methanol<br>67-56-1<br>200-659-6<br>01-2119433307-44   | 0,1 - < 1 %   | Flam. Liq. 2, H225<br>Acute Tox. 3, Inhalation, H331<br>Acute Tox. 3, Dermal, H311<br>Acute Tox. 3, Oral, H301<br>STOT SE 1, H370                                   | STOT SE 1; H370; C $\geq 10$ %<br>STOT SE 2; H371; C 3 - < 10 %<br>=====<br>oral:ATE = 300 mg/kg | EU OEL           |
| Dibutoxydibutylstannane<br>3349-36-8<br>222-103-1<br>01-2119557858-18                        | 0,1 - < 0,3 % | Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Repr. 1B, H360FD<br>STOT SE 1, H370<br>STOT RE 1, H372<br>Aquatic Chronic 2, H411<br>Eye Dam. 1, H318 | oral:ATE = 2.500 mg/kg   |                  |

For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation:  
Move to fresh air, consult doctor if complaint persists.

**Skin contact:**

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

An allergic reaction cannot be excluded after repeated skin contact.

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

See section: Description of first aid measures

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media:**

All common extinguishing agents are suitable.

**Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

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

In case of fire toxic gases can be released.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus.

Wear protective equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment.

**6.2. Environmental precautions**

Do not empty into drains / surface water / ground water.

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

Dispose of contaminated material as waste according to Section 13.

Remove mechanically.

**6.4. Reference to other sections**

See advice in section 8

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Hygiene measures:**

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

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

Ensure good ventilation/extraction.

Keep container in a well ventilated place.

Ensure adequate ventilation.

Store in a cool, frost-free place.

Temperatures between + 10 °C and + 25 °C

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

MS Adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational Exposure Limits

Valid for  
Great Britain

| Ingredient [Regulated substance]  | ppm | mg/m <sup>3</sup> | Value type                        | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------------------|-----------------------------------|--|-----------------|
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE, INHALABLE DUST]                              |     | 10                | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE, RESPIRABLE DUST]                             |     | 4                 | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Calcium carbonate<br>471-34-1<br>[LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]                       |     | 4                 | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Calcium carbonate<br>471-34-1<br>[LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]             |     | 10                | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Calcium carbonate<br>471-34-1<br>[Dust, inhalable dust]   |     | 10                | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Calcium carbonate<br>471-34-1<br>[Dust, respirable dust]  |     | 4                 | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, INHALABLE DUST]                             |     | 6                 | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, RESPIRABLE DUST]                            |     | 2,4               | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Silicon dioxide<br>112945-52-5<br>[Dust, respirable dust]   |     | 4                 | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Silicon dioxide<br>112945-52-5<br>[Dust, inhalable dust]  |     | 10                | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Carbon black<br>1333-86-4<br>[CARBON BLACK]   |     | 3,5               | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Carbon black<br>1333-86-4<br>[CARBON BLACK]   |     | 7                 | Short Term Exposure Limit (STEL): | 15 minutes                                   | EH40 WEL        |
| Dibutoxydibutylstannane<br>3349-36-8<br>[TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)] |     | 0,1               | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Dibutoxydibutylstannane<br>3349-36-8<br>[TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)] |     |                   | Skin designation:                 | Can be absorbed through the skin.            | EH40 WEL        |
| Dibutoxydibutylstannane<br>3349-36-8<br>[TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)] |     | 0,2               | Short Term Exposure Limit (STEL): | 15 minutes                                   | EH40 WEL        |
| Methanol<br>67-56-1<br>[METHANOL]   |     |                   | Skin designation:                 | Can be absorbed through the skin.            | EH40 WEL        |
| Methanol<br>67-56-1<br>[METHANOL]   | 200 | 266               | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Methanol<br>67-56-1<br>[METHANOL]   | 200 | 260               | Time Weighted Average (TWA):      | Indicative                                   | ECTLV           |

|                                   |     |     |                                      |            |          |
|-----------------------------------|-----|-----|--------------------------------------|------------|----------|
| Methanol<br>67-56-1<br>[METHANOL] | 250 | 333 | Short Term Exposure<br>Limit (STEL): | 15 minutes | EH40 WEL |
|-----------------------------------|-----|-----|--------------------------------------|------------|----------|

### Occupational Exposure Limits

Valid for  
Ireland

| Ingredient [Regulated substance]                                 | ppm | mg/m <sup>3</sup> | Value type                           | Short term exposure limit<br>category / Remarks | Regulatory list |
|--|-----|-------------------|--------------------------------------|---|-----------------|
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE]             |     | 4                 | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE]             |     | 10                | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Calcium carbonate<br>471-34-1<br>[DUSTS NON-SPECIFIC]            |     | 4                 | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Calcium carbonate<br>471-34-1<br>[DUSTS NON-SPECIFIC]            |     | 10                | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS]            |     | 6                 | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS]            |     | 2,4               | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Silicon dioxide<br>112945-52-5<br>[DUSTS NON-SPECIFIC]           |     | 10                | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Silicon dioxide<br>112945-52-5<br>[DUSTS NON-SPECIFIC]           |     | 4                 | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Carbon black<br>1333-86-4<br>[CARBON BLACK]                      |     | 3                 | Time Weighted Average<br>(TWA):      |   | IR_OEL          |
| Dibutoxydibutylstannane<br>3349-36-8<br>[TIN, ORGANIC COMPOUNDS] |     | 0,2               | Short Term Exposure<br>Limit (STEL): | 15 minutes<br>Indicative OELV                   | IR_OEL          |
| Dibutoxydibutylstannane<br>3349-36-8<br>[TIN, ORGANIC COMPOUNDS] |     | 0,1               | Time Weighted Average<br>(TWA):      | Indicative OELV                                 | IR_OEL          |
| Methanol<br>67-56-1<br>[METHANOL]                                | 200 | 260               | Time Weighted Average<br>(TWA):      | Indicative OELV                                 | IR_OEL          |
| Methanol<br>67-56-1<br>[METHANOL]                                |     |                   | Skin designation:                    | Can be absorbed through the<br>skin.            | IR_OEL          |
| Methanol<br>67-56-1<br>[METHANOL]                                | 200 | 260               | Time Weighted Average<br>(TWA):      | Indicative                                      | ECTLV           |

**Predicted No-Effect Concentration (PNEC):**

| Name on list  | Environmental<br>Compartment       | Exposure<br>period | Value           |     |                 |        | Remarks              |
|---|------------------------------------|--------------------|-----------------|-----|-----------------|--------|----------------------|
|   |                                    |                    | mg/l            | ppm | mg/kg           | others |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | aqua<br>(freshwater)               |                    | 0,004 mg/l      |     |                 |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | aqua (marine<br>water)             |                    | 0,00038<br>mg/l |     |                 |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | Freshwater -<br>intermittent       |                    | 0,007 mg/l      |     |                 |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | sediment<br>(freshwater)           |                    |                 |     | 5,9 mg/kg       |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | sediment<br>(marine water)         |                    |                 |     | 0,59 mg/kg      |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | Soil                               |                    |                 |     | 1,18 mg/kg      |        |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | sewage<br>treatment plant<br>(STP) |                    | 1 mg/l          |     |                 |        |                      |
| methanol<br>67-56-1   | aqua<br>(freshwater)               |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | sediment<br>(freshwater)           |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | aqua (marine<br>water)             |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | Soil                               |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | sewage<br>treatment plant<br>(STP) |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | aqua<br>(intermittent<br>releases) |                    |                 |     |                 |        | no hazard identified |
| methanol<br>67-56-1   | sediment<br>(marine water)         |                    |                 |     |                 |        | no hazard identified |
| Dibutoxydibutylstannane<br>3349-36-8                        | aqua<br>(freshwater)               |                    | 0,0019<br>mg/l  |     |                 |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | aqua<br>(intermittent<br>releases) |                    | 0,019 mg/l      |     |                 |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | aqua (marine<br>water)             |                    | 0,00019<br>mg/l |     |                 |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | sewage<br>treatment plant<br>(STP) |                    | 33 mg/l         |     |                 |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | sediment<br>(freshwater)           |                    |                 |     | 0,193<br>mg/kg  |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | sediment<br>(marine water)         |                    |                 |     | 0,0193<br>mg/kg |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | Soil                               |                    |                 |     | 0,076<br>mg/kg  |        |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | oral                               |                    |                 |     | 0,2 mg/kg       |        |                      |

**Derived No-Effect Level (DNEL):**

| Name on list  | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value      | Remarks              |
|---|--------------------|-------------------|--|---------------|------------|----------------------|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | Workers            | dermal            | Long term exposure - systemic effects        |               | 1,8 mg/kg  |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 1,27 mg/m3 |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | General population | Inhalation        | Long term exposure - systemic effects        |               | 0,31 mg/m3 |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | General population | dermal            | Long term exposure - systemic effects        |               | 0,9 mg/kg  |                      |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | General population | oral              | Long term exposure - systemic effects        |               | 0,18 mg/kg |                      |
| methanol<br>67-56-1   | Workers            | inhalation        | Long term exposure - systemic effects        |               | 260 mg/m3  | no hazard identified |
| methanol<br>67-56-1   | Workers            | inhalation        | Acute/short term exposure - systemic effects |               | 260 mg/m3  | no hazard identified |
| methanol<br>67-56-1   | Workers            | inhalation        | Long term exposure - local effects           |               | 260 mg/m3  | no hazard identified |
| methanol<br>67-56-1   | Workers            | inhalation        | Acute/short term exposure - local effects    |               | 260 mg/m3  | no hazard identified |
| methanol<br>67-56-1   | Workers            | dermal            | Long term exposure - systemic effects        |               | 40 mg/kg   | no hazard identified |
| methanol<br>67-56-1   | Workers            | dermal            | Acute/short term exposure - systemic effects |               | 40 mg/kg   | no hazard identified |
| methanol<br>67-56-1   | General population | inhalation        | Long term exposure - systemic effects        |               | 50 mg/m3   | no hazard identified |
| methanol<br>67-56-1   | General population | inhalation        | Acute/short term exposure - systemic effects |               | 50 mg/m3   | no hazard identified |
| methanol<br>67-56-1   | General population | inhalation        | Long term exposure - local effects           |               | 50 mg/m3   | no hazard identified |
| methanol<br>67-56-1   | General population | inhalation        | Acute/short term exposure - local effects    |               | 50 mg/m3   | no hazard identified |
| methanol<br>67-56-1   | General population | dermal            | Long term exposure - systemic effects        |               | 8 mg/kg    | no hazard identified |
| methanol<br>67-56-1   | General population | dermal            | Acute/short term exposure - systemic effects |               | 8 mg/kg    | no hazard identified |
| methanol<br>67-56-1   | General population | oral              | Long term exposure - systemic effects        |               | 8 mg/kg    | no hazard identified |
| methanol<br>67-56-1   | General population | oral              | Acute/short term exposure - systemic effects |               | 8 mg/kg    | no hazard identified |
| Dibutoxydibutylstannane<br>3349-36-8                        | Workers            | dermal            | Acute/short term exposure - systemic effects |               | 1 mg/kg    |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | Workers            | inhalation        | Acute/short term exposure - systemic effects |               | 0,07 mg/m3 |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | Workers            | dermal            | Long term exposure - systemic effects        |               | 0,2 mg/kg  |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | Workers            | inhalation        | Long term exposure - systemic effects        |               | 0,01 mg/m3 |                      |
| Dibutoxydibutylstannane<br>3349-36-8                        | General population | dermal            | Acute/short term exposure -                  |               | 0,5 mg/kg  |                      |



|                                      |                    |            |  |  |             |  |
|--------------------------------------|--------------------|------------|--|--|-------------|--|
|                                      |                    |            | systemic effects                             |  |             |  |
| Dibutoxydibutylstannane<br>3349-36-8 | General population | inhalation | Acute/short term exposure - systemic effects |  | 0,02 mg/m3  |  |
| Dibutoxydibutylstannane<br>3349-36-8 | General population | oral       | Acute/short term exposure - systemic effects |  | 0,01 mg/kg  |  |
| Dibutoxydibutylstannane<br>3349-36-8 | General population | dermal     | Long term exposure - systemic effects        |  | 0,08 mg/kg  |  |
| Dibutoxydibutylstannane<br>3349-36-8 | General population | inhalation | Long term exposure - systemic effects        |  | 0,003 mg/m3 |  |
| Dibutoxydibutylstannane<br>3349-36-8 | General population | oral       | Long term exposure - systemic effects        |  | 0,002 mg/kg |  |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

The product should only be used at workplaces with intensive ventilation/extraction.

If intensive ventilation/extraction is not possible respiratory protection equipment with ABEK P2 filter (EN 14387) should be worn.

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR;  $\geq 1$  mm thickness) or natural rubber (NR;  $\geq 1$  mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR;  $\geq 1$  mm thickness) or natural rubber (NR;  $\geq 1$  mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Protective goggles

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway), or equivalent.

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.

Personal protective equipment should conform to the relevant EN standard.

## SECTION 9: Physical and chemical properties

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

Physical state

solid

Delivery form

paste

Colour

black

Odor

characteristic

Melting point

Currently under determination

Initial boiling point

Currently under determination

Flammability

non flammable

Explosive limits

Not applicable, Product is a solid.

|  |  |
|--|--|
| Flash point                            | Currently under determination              |
| Auto-ignition temperature              | Currently under determination              |
| Decomposition temperature              | Currently under determination              |
| pH                                     | Not applicable, Product reacts with water. |
| Viscosity (kinematic)                  | Not applicable, Product is a solid.        |
| Solubility (qualitative)               | Currently under determination              |
| Partition coefficient: n-octanol/water | Currently under determination              |
| Vapour pressure                        | Currently under determination              |
| Density<br>(20 °C (68 °F))             | 1,4 g/cm3 no method                        |
| Relative vapour density:               | Not applicable, Product is a solid.        |
| Particle characteristics               | Currently under determination              |

## 9.2. Other information

Other information not applicable for this product

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None if used for intended purpose.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

None if used for intended purpose.

### 10.5. Incompatible materials

None if used properly.

### 10.6. Hazardous decomposition products

No decomposition if used according to specifications.

## SECTION 11: Toxicological information

### General toxicological information:

An allergic reaction cannot be excluded after repeated skin contact.

### 1.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type                          | Value         | Species | Method  |
|---|--|---------------|---------|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | LD50                                   | 8.025 mg/kg   | rat     | equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | LD50                                   | 3.700 mg/kg   | rat     | OECD Guideline 423 (Acute Oral toxicity)                          |
| methanol<br>67-56-1   | Acute<br>toxicity<br>estimate<br>(ATE) | 300 mg/kg     |         | Expert judgement  |
| Dibutoxydibutylstannane<br>3349-36-8  | LD50                                   | > 2.000 mg/kg | rat     | OECD Guideline 420 (Acute Oral Toxicity)                          |
| Dibutoxydibutylstannane<br>3349-36-8  | Acute<br>toxicity<br>estimate<br>(ATE) | 2.500 mg/kg   |         | Expert judgement  |

#### Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value         | Species | Method  |
|---|---------------|---------------|---------|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | LD50          | 4.248 mg/kg   | rabbit  | equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | LD50          | > 3.170 mg/kg | rat     | OECD Guideline 402 (Acute Dermal Toxicity)                          |

**Acute inhalative toxicity:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type                 | Value      | Test atmosphere | Exposure<br>time | Species | Method  |
|---|-------------------------------|------------|-----------------|------------------|---------|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | LC50                          | > 5,3 mg/l | dust/mist       | 4 h              | rat     | equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity) |
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | Acute toxicity estimate (ATE) | 12,5 mg/l  | dust/mist       | 4 h              |         | Expert judgement  |

**Skin corrosion/irritation:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                             | Result         | Exposure<br>time | Species  | Method  |
|---|----------------|------------------|--|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | not irritating | 24 h             | rabbit   | EPA OPP 81-5 (Acute Dermal Irritation)  |
| methanol<br>67-56-1   | not irritating | 20 h             | rabbit   | BASF Test   |
| Dibutoxydibutylstannane<br>3349-36-8                        | not corrosive  |                  | Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE) | OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method) |
| Dibutoxydibutylstannane<br>3349-36-8                        | irritating     |                  | Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE) | other guideline:  |

**Serious eye damage/irritation:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Result                                       | Exposure<br>time | Species | Method  |
|---|--|------------------|---------|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | corrosive                                    |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | corrosive                                    | 24 h             | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| methanol<br>67-56-1   | not irritating                               |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| Dibutoxydibutylstannane<br>3349-36-8  | Category 1 (irreversible effects on the eye) |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                             | Result          | Test type                    | Species    | Method   |
|---|-----------------|------------------------------|------------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation)                          |
| methanol<br>67-56-1   | not sensitising | Guinea pig maximisation test | guinea pig | equivalent or similar to OECD Guideline 406 (Skin Sensitisation) |

**Germ cell mutagenicity:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                             | Result   | Type of study / Route of administration          | Metabolic activation / Exposure time | Species | Method   |
|--|----------|--|--------------------------------------|---------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                     |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                    |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | negative | in vitro mammalian chromosome aberration test    | with and without                     |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                       |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | negative | mammalian cell gene mutation assay               | with and without                     |         | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                          |
| methanol 67-56-1   | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                     |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                    |
| methanol 67-56-1   | negative | in vitro mammalian cell micronucleus test        | without                              |         | not specified  |
| methanol 67-56-1   | negative | mammalian cell gene mutation assay               | with and without                     |         | equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| Dibutoxydibutylstannane 3349-36-8                        | positive | in vitro mammalian chromosome aberration test    | with and without                     |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                       |
| methanol 67-56-1   | negative | intraperitoneal                                  |                                      | mouse   | equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)    |

**Carcinogenicity**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous components CAS-No. | Result           | Route of application | Exposure time / Frequency of treatment | Species | Sex         | Method   |
|------------------------------|------------------|----------------------|--|---------|-------------|--|
| methanol 67-56-1             | not carcinogenic | inhalation: vapour   | 18 m<br>19 h/d                         | mouse   | male/female | equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

**Reproductive toxicity:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                             | Result / Value   | Test type            | Route of application | Species | Method   |
|--|--|----------------------|----------------------|---------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | NOAEL P 109 mg/kg<br>NOAEL F1 121 mg/kg                      | two-generation study | oral: feed           | rat     | OECD Guideline 443 (Extended One-Generation Reproductive Toxicity Study)                 |
| methanol 67-56-1   | NOAEL P 1,3 mg/l<br>NOAEL F1 0,13 mg/l<br>NOAEL F2 0,13 mg/l | Two generation study | inhalation           | rat     | equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) |
| Dibutoxydibutylstannane 3349-36-8                        | NOAEL P 1,9 - 2,3 mg/kg                                      | screening            | oral: feed           | rat     | OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)                |

**STOT-single exposure:**

No data available.

**STOT-repeated exposure::**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                             | Result / Value  | Route of<br>application | Exposure time /<br>Frequency of<br>treatment | Species | Method  |
|---|-----------------|-------------------------|--|---------|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | NOAEL 36 mg/kg  | oral: feed              | daily  | rat     | other guideline:  |
| methanol<br>67-56-1   | NOAEL 6,63 mg/l | inhalation:<br>vapour   | 4 weeks<br>6 h/d, 5 d/w                      | rat     | equivalent or similar to<br>OECD Guideline 412<br>(Repeated Dose<br>Inhalation Toxicity:<br>28/14-Day)        |
| methanol<br>67-56-1   | NOAEL 0,13 mg/l | inhalation:<br>vapour   | 12 m<br>20 h/d                               | rat     | equivalent or similar to<br>OECD Guideline 453<br>(Combined Chronic<br>Toxicity / Carcinogenicity<br>Studies) |

**Aspiration hazard:**

No data available.

**11.2 Information on other hazards**

not applicable

## SECTION 12: Ecological information

### General ecological information:

Do not empty into drains, soil or bodies of water.

### 12.1. Toxicity

#### Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value       | Exposure time | Species                                   | Method  |
|---|---------------|-------------|---------------|---|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | LC50          | 55 mg/l     | 96 h          | Cyprinus carpio                           | EU Method C.1 (Acute Toxicity for Fish)   |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | LC50          | 4,4 mg/l    | 96 h          | Lepomis macrochirus                       | OECD Guideline 203 (Fish, Acute Toxicity Test)  |
| methanol<br>67-56-1   | LC50          | 15.400 mg/l | 96 h          | Lepomis macrochirus                       | EPA-660 (Methods for Acute Toxicity Tests with Fish, Macroinvertebrates and Amphibians) |
| methanol<br>67-56-1   | NOEC          | 7.900 mg/l  | 200 h         | Oryzias latipes                           | OECD Guideline 210 (fish early life stage toxicity test)                                |
| Dibutoxydibutylstannane<br>3349-36-8  | LC50          | > 3,1 mg/l  | 96 h          | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test)  |

#### Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value       | Exposure time | Species              | Method   |
|---|---------------|-------------|---------------|----------------------|--|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | EC50          | 324 mg/l    | 48 h          | Simocephalus vetulus | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | EC50          | 8,58 mg/l   | 48 h          | Daphnia magna        | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| methanol<br>67-56-1   | EC50          | 18.260 mg/l | 96 h          | Daphnia magna        | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Dibutoxydibutylstannane<br>3349-36-8  | EC50          | 1,9 mg/l    | 48 h          | Daphnia magna        | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

#### Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value     | Exposure time | Species       | Method                                      |
|---|---------------|-----------|---------------|---------------|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | NOEC          | 100 mg/l  | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | NOEC          | 0,23 mg/l | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |

#### Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value       | Exposure time | Species  | Method  |
|---|---------------|-------------|---------------|--|---|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | EC50          | 350 mg/l    | 96 h          | Pseudokirchneriella subcapitata  | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | NOEC          | 130 mg/l    | 96 h          | Pseudokirchneriella subcapitata  | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | EC50          | 0,705 mg/l  | 72 h          | Pseudokirchneriella subcapitata  | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | EC10          | 0,188 mg/l  | 72 h          | Pseudokirchneriella subcapitata  | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| methanol<br>67-56-1   | EC50          | 22.000 mg/l | 96 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Dibutoxydibutylstannane<br>3349-36-8  | EC50          | 1,6 mg/l    | 72 h          | Scenedesmus subspicatus (new name: Desmodesmus subspicatus)              | OECD Guideline 201 (Alga, Growth Inhibition Test) |

### Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.   | Value<br>type | Value        | Exposure time | Species   | Method   |
|---|---------------|--------------|---------------|---|--|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | EC50          | > 100 mg/l   | 3 h           | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | EC50          | > 100 mg/l   | 3 h           | activated sludge, domestic                          | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| methanol<br>67-56-1   | IC50          | > 1.000 mg/l | 3 h           | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Dibutoxydibutylstannane<br>3349-36-8  | EC50          | > 1.000 mg/l | 3 h           | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

### 12.2. Persistence and degradability

| Hazardous substances<br>CAS-No.   | Result                     | Test type | Degradability | Exposure time | Method   |
|---|----------------------------|-----------|---------------|---------------|--|
| Oxirane, 2-[[3-(trimethoxysilyl)propoxy]methyl]-, homopolymer<br>56325-93-0 | not readily biodegradable. |           | < 60 %        | 28 d          | OECD 301 A - F   |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9                 | not readily biodegradable. | aerobic   | 24 %          | 28 d          | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)                  |
| methanol<br>67-56-1   | readily biodegradable      | aerobic   | 82 - 92 %     | 30 d          | EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test) |
| Dibutoxydibutylstannane<br>3349-36-8  | not readily biodegradable. | aerobic   | > 0 - < 60 %  | 28 d          | OECD 301 A - F   |

### 12.3. Bioaccumulative potential

| Hazardous substances<br>CAS-No. | Bioconcentration factor (BCF) | Exposure time | Temperature | Species                  | Method        |
|---------------------------------|-------------------------------|---------------|-------------|--------------------------|---------------|
| methanol<br>67-56-1             | < 10                          | 72 h          |             | Leuciscus idus melanotus | not specified |

### 12.4. Mobility in soil



| Hazardous substances<br>CAS-No.                             | LogPow | Temperature | Method   |
|---|--------|-------------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | 0,35   | 25 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| methanol<br>67-56-1   | -0,77  |             | other guideline:   |

#### 12.5. Results of PBT and vPvB assessment

| Hazardous substances<br>CAS-No.                             | PBT / vPvB  |
|---|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate<br>52829-07-9 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| methanol<br>67-56-1   | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Dibutoxydibutylstannane<br>3349-36-8                        | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

#### 12.6. Endocrine disrupting properties

not applicable

#### 12.7. Other adverse effects

No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09.

**SECTION 14: Transport information****14.1. UN number**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**14.2. UN proper shipping name**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**14.3. Transport hazard class(es)**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**14.4. Packing group**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**14.5. Environmental hazards**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**14.6. Special precautions for user**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

**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**

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):

Not applicable

Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):

Dibutoxydibutylstannane  
CAS 3349-36-8

Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable

VOC content

0,1 %

(2010/75/EU)

**15.2. Chemical safety assessment**

A chemical safety assessment has been carried out.

**SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapour.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H331 Toxic if inhaled.  
H341 Suspected of causing genetic defects.  
H360FD May damage fertility. May damage the unborn child.  
H361f Suspected of damaging fertility.  
H370 Causes damage to organs.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

|             |   |
|-------------|---|
| ED:         | Substance identified as having endocrine disrupting properties  |
| EU OEL:     | Substance with a Union workplace exposure limit   |
| EU EXPLD 1: | Substance listed in Annex I, Reg (EC) No. 2019/1148   |
| EU EXPLD 2  | Substance listed in Annex II, Reg (EC) No. 2019/1148  |
| SVHC:       | Substance of very high concern (REACH Candidate List)   |
| PBT:        | Substance fulfilling persistent, bioaccumulative and toxic criteria   |
| PBT/vPvB:   | Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria |
| vPvB:       | Substance fulfilling very persistent and very bioaccumulative criteria  |

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