

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

Page 1 of 16

SDS No.: 634030 V007.0

Revision: 02.11.2022

printing date: 03.11.2022

Replaces version from: 14.06.2022

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

1.1. Product identifier

TEROSON MS 9320SF GY

TEROSON MS 9320SF GY

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

Intended use:

MS Sealant

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.

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information Contains: Trimethoxyvinylsilane May produce an allergic reaction.

Safety data sheet available on request.

Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

2.3. Other hazards

None if used properly.

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

Following substances are present in a concentration >= 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 ≥ 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 CAS-No. EC Number REACH-Reg No. | Concentration | Classification | Specific Conc. Limits, M- factors and ATEs | Add. Information |
|---|---------------|--|---|---------------------|
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 236-675-5 01-2119489379-17 | 1- < 3 % | | | |
| Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate 52829-07-9 258-207-9 01-2119537297-32 | 0,1-< 1 % | Repr. 2, H361f Eye Dam. 1, H318 Aquatic Chronic 2, H411 Aquatic Acute 1, H400 | M acute = 1 | |
| Trimethoxyvinylsilane 2768-02-7 220-449-8 01-2119513215-52 | 0,1-< 1 % | Flam. Liq. 3, H226 Acute Tox. 4, Inhalation, H332 STOT RE 2, H373 Skin Sens. 1B, H317 | | |

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

Remove mechanically.

Dispose of contaminated material as waste according to Section 13.

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.

Temperatures between + 10 °C and + 25 °C

7.3. Specific end use(s)

MS Sealant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|--|-----|-------------------|---------------------------------|--|-----------------|
| Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [Dust, inhalable dust] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium carbonate 471-34-1 [Dust, respirable dust] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Di-"isononyl" phthalate 28553-12-0 [Diisononyl phthalate] | | 5 | Time Weighted Average (TWA): | | EH40 WEL |
| Titanium dioxide 13463-67-7 [Titanium dioxide, total inhalable] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Titanium dioxide 13463-67-7 [Titanium dioxide, respirable] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |

Occupational Exposure Limits

Valid for

Ireland

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------|------------------------------|--|-----------------|
| Limestone 1317-65-3 [CALCIUM CARBONATE] | | 4 | Time Weighted Average (TWA): | | IR_OEL |
| Limestone 1317-65-3 [CALCIUM CARBONATE] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Calcium carbonate | | 4 | Time Weighted Average | | IR_OEL |

| 471-34-1 | | (TWA): | |
|----------------------------------|----|------------------------------|--------|
| [CALCIUM CARBONATE] | | (). | |
| Calcium carbonate 471-34-1 | 10 | Time Weighted Average (TWA): | IR_OEL |
| [CALCIUM CARBONATE] | | | |
| Calcium carbonate 471-34-1 | 4 | Time Weighted Average (TWA): | IR_OEL |
| [DUSTS NON-SPECIFIC] | | (1 1/11). | |
| Calcium carbonate | 10 | Time Weighted Average | IR_OEL |
| 471-34-1 [DUSTS NON-SPECIFIC] | | (TWA): | |
| Di-"isononyl" phthalate | 5 | Time Weighted Average | IR OEL |
| 28553-12-0 | | (TWA): | |
| [Diisononyl phthalate] | | | |
| Titanium dioxide | 4 | Time Weighted Average | IR_OEL |
| 13463-67-7 | | (TWA): | |
| [Titanium dioxide] | | | |
| Titanium dioxide | 10 | Time Weighted Average | IR_OEL |
| 13463-67-7 | | (TWA): | |
| [Titanium dioxide] | | | |

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental | | Value | | | | Remarks |
|--|------------------------------------|--------|-----------------|-----|------------|--------|---------|
| | Compartment | period | mg/l | ppm | mg/kg | others | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | aqua (freshwater) | | 0,004 mg/l | ppm | mg/kg | others | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | aqua (marine water) | | 0,00038 mg/l | | | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | Freshwater - intermittent | | 0,007 mg/l | | | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | sediment (freshwater) | | | | 5,9 mg/kg | | |
| 52829-07-9 | (marine water) | | | | 0,59 mg/kg | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | Soil | | | | 1,18 mg/kg | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | sewage treatment plant (STP) | | 1 mg/l | | | | |
| Trimethoxyvinylsilane 2768-02-7 | aqua (freshwater) | | 0,4 mg/l | | | | |
| Trimethoxyvinylsilane 2768-02-7 | aqua (marine water) | | 0,04 mg/l | | | | |
| Trimethoxyvinylsilane 2768-02-7 | Freshwater - intermittent | | 1,21 mg/l | | | | |
| Trimethoxyvinylsilane 2768-02-7 | sediment (freshwater) | | | | 1,5 mg/kg | | |
| Trimethoxyvinylsilane 2768-02-7 | sediment (marine water) | | | | 0,15 mg/kg | | |
| Trimethoxyvinylsilane 2768-02-7 | Soil | | | | 0,06 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 52829-07-9 | Workers | dermal | Long term exposure - systemic effects | | 1,8 mg/kg | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | Workers | Inhalation | Long term exposure - systemic effects | | 1,27 mg/m3 | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | General population | Inhalation | Long term exposure - systemic effects | | 0,31 mg/m3 | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | General population | dermal | Long term exposure - systemic effects | | 0,9 mg/kg | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | General population | oral | Long term exposure - systemic effects | | 0,18 mg/kg | |
| Trimethoxyvinylsilane 2768-02-7 | Workers | dermal | Long term exposure - systemic effects | | 0,91 mg/kg | |
| Trimethoxyvinylsilane 2768-02-7 | Workers | inhalation | Long term exposure - systemic effects | | 27,6 mg/m3 | |
| Trimethoxyvinylsilane 2768-02-7 | General population | dermal | Long term exposure - systemic effects | | 0,63 mg/kg | |
| Trimethoxyvinylsilane 2768-02-7 | General population | inhalation | Long term exposure - systemic effects | | 6,8 mg/m3 | |
| Trimethoxyvinylsilane 2768-02-7 | General population | oral | Long term exposure - systemic effects | | 0,63 mg/kg | |
| Trimethoxyvinylsilane 2768-02-7 | Workers | inhalation | Acute/short term exposure - systemic effects | | 73,6 mg/m3 | |
| Trimethoxyvinylsilane 2768-02-7 | General population | inhalation | Acute/short term exposure - systemic effects | | 54,4 mg/m3 | |

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.

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; >= 1 mm thickness) or natural rubber (NR; >= 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; >= 1 mm thickness) or natural rubber (NR; >= 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 grey
Odor alcohol-like

Melting point Not applicable, Determination technically not possible

Solidification temperature Not applicable, Product is a solid.

Initial boiling point $> 300 \,^{\circ}\text{C} (> 572 \,^{\circ}\text{F})$

Flammability

Explosive limits

Flash point

Auto-ignition temperature

The product is not flammable.

Not applicable, Product is a solid.

Not applicable, Product is a solid.

Not applicable, Product is a solid.

Decomposition temperature Not applicable, Substance/mixture is not self-reactive, no

organic peroxide and does not decompose under foreseen

conditions of use

pH Not applicable, Product reacts with water.

Viscosity (kinematic) Not applicable, Product is a solid.

Solubility (qualitative) Reacts with water.

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water Not applicable

Mixture

Vapour pressure < 0,1 hPa

(20 °C (68 °F))

Density 1,54 g/cm3 no method

(20 °C (68 °F))

Bulk density 1,54 g/cm³

Relative vapour density: Not applicable, Product is a solid. Particle characteristics Not applicable, mixture is a paste.

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 | Value | Value | Species | Method |
|----------------------------|-------|---------------|---------|--|
| CAS-No. | type | | | |
| Titanium dioxide < 1% | LD50 | > 5.000 mg/kg | rat | OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down |
| particles with diameter ≤ | | | | Procedure) |
| 10 μm | | | | |
| 13463-67-7 | | | | |
| Bis(2,2,6,6-tetramethyl-4- | LD50 | 3.700 mg/kg | rat | OECD Guideline 423 (Acute Oral toxicity) |
| piperidyl) sebacate | | | | |
| 52829-07-9 | | | | |
| Trimethoxyvinylsilane | LD50 | 7.120 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| 2768-02-7 | | | | |

Acute dermal toxicity:

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

| Hazardous substances | Value | Value | Species | Method |
|---|-------|--------------------|---------|--|
| CAS-No. | type | | | |
| Titanium dioxide < 1% particles with diameter ≤ 10 μm | LD50 | >= 10.000 mg/kg | hamster | not specified |
| 13463-67-7 Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate 52829-07-9 | LD50 | > 3.170 mg/kg | rat | OECD Guideline 402 (Acute Dermal Toxicity) |
| Trimethoxyvinylsilane 2768-02-7 | LD50 | 3.200 mg/kg | rabbit | 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 | Value | Value | Test atmosphere | Exposure | Species | Method |
|---------------------------|-------|-------------|-----------------|----------|---------|---------------------------|
| CAS-No. | type | | | time | | |
| Titanium dioxide < 1% | LC50 | > 6,82 mg/l | dust | 4 h | rat | not specified |
| particles with diameter ≤ | | | | | | |
| 10 μm | | | | | | |
| 13463-67-7 | | | | | | |
| Trimethoxyvinylsilane | LC50 | 16,8 mg/l | vapour | 4 h | rat | OECD Guideline 403 (Acute |
| 2768-02-7 | | | - | | | Inhalation Toxicity) |

Skin corrosion/irritation:

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

| Hazardous substances CAS-No. | Result | Exposure time | Species | Method |
|--|----------------|---------------|---------|---|
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | not irritating | 4 h | rabbit | equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | not irritating | 24 h | rabbit | EPA OPP 81-5 (Acute Dermal Irritation) |
| Trimethoxyvinylsilane 2768-02-7 | not irritating | | rabbit | 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 | Result | Exposure | Species | Method |
|----------------------------|----------------|----------|---------|---|
| CAS-No. | | time | | |
| Titanium dioxide < 1% | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| particles with diameter ≤ | | | | |
| 10 μm | | | | |
| 13463-67-7 | | | | |
| Bis(2,2,6,6-tetramethyl-4- | corrosive | 24 h | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| piperidyl) sebacate | | | | |
| 52829-07-9 | | | | |
| Trimethoxyvinylsilane | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| 2768-02-7 | | | | |

Respiratory or skin sensitization:

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

| Hazardous substances | Result | Test type | Species | Method |
|--|-----------------|---------------------------------------|------------|---|
| CAS-No. | | | | |
| Titanium dioxide < 1% particles with diameter ≤ | not sensitising | Mouse local lymphnode assay (LLNA) | mouse | equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph |
| 10 μm | | | | Node Assay) |
| 13463-67-7 | | | | - |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| Trimethoxyvinylsilane 2768-02-7 | sensitising | Buehler test | guinea pig | 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 |
|--|----------|--|--|---------|--|
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| 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) |
| Trimethoxyvinylsilane 2768-02-7 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Trimethoxyvinylsilane 2768-02-7 | positive | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Trimethoxyvinylsilane 2768-02-7 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | negative | oral: gavage | | mouse | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) |
| Trimethoxyvinylsilane 2768-02-7 | negative | intraperitoneal | | mouse | other guideline: |

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 |
|--|------------------|----------------------|---|---------|-------------|--|
| Titanium dioxide < 1% particles with diameter ≤ 10 µm 13463-67-7 | not carcinogenic | inhalation | 24 m 6 h/d; 5 d/w | rat | male/female | 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 | Result / Value | Test type | Route of | Species | Method |
|----------------------------|--------------------------|------------|--------------|---------|---------------------------|
| CAS-No. | | | application | | |
| Titanium dioxide < 1% | NOAEL P > 1.000 mg/kg | | oral: gavage | rat | OECD Guideline 421 |
| particles with diameter ≤ | | | | | (Reproduction / |
| 10 μm | NOAEL F1 > 1.000 mg/kg | | | | Developmental Toxicity |
| 13463-67-7 | | | | | Screening Test) |
| Bis(2,2,6,6-tetramethyl-4- | NOAEL P 109 mg/kg | two- | oral: feed | rat | OECD Guideline 443 |
| piperidyl) sebacate | | generation | | | (Extended One-Generation |
| 52829-07-9 | NOAEL F1 121 mg/kg | study | | | Reproductive Toxicity |
| | | | | | Study) |
| Trimethoxyvinylsilane | NOAEL P 250 mg/kg | one- | oral: gavage | rat | OECD Combined Repeated |
| 2768-02-7 | | generation | | | Dose and Reproductive / |
| | | study | | | Developmental Toxicity |
| | | | | | Screening Test (Precursor |
| m: 1 : 1 : 1 | NO 151 5 1 000 4 | | | | Protocol of GL 422) |
| Trimethoxyvinylsilane | NOAEL P 1.000 mg/kg | one- | oral: gavage | rat | OECD Combined Repeated |
| 2768-02-7 | | generation | | | Dose and Reproductive / |
| | | study | | | Developmental Toxicity |
| | | | | | Screening Test (Precursor |
| m: 4 : 1:1 | NOAEL E1 1 000 A | | 1 | | Protocol of GL 422) |
| Trimethoxyvinylsilane | NOAEL F1 1.000 mg/kg | one- | oral: gavage | rat | OECD Combined Repeated |
| 2768-02-7 | | generation | | | Dose and Reproductive / |
| | | study | | | Developmental Toxicity |
| | | | | | Screening Test (Precursor |
| | | | | 1 | Protocol of GL 422) |

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 | Result / Value | Route of | Exposure time / | Species | Method |
|--|--------------------|-----------------------|--|---------|---|
| CAS-No. | | application | Frequency of treatment | | |
| Titanium dioxide < 1% particles with diameter ≤ 10 μm 13463-67-7 | NOAEL 1.000 mg/kg | oral: gavage | 90 d daily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | NOAEL 36 mg/kg | oral: feed | daily | rat | other guideline: |
| Trimethoxyvinylsilane 2768-02-7 | NOAEL < 62,5 mg/kg | oral: gavage | 42d daily | rat | OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| Trimethoxyvinylsilane 2768-02-7 | NOAEL 0,605 mg/l | inhalation: vapour | 5 days/week for 14 weeks 6 hours/day | rat | not specified |

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 | Value | Value | Exposure time | Species | Method |
|-----------------------------------|-------|------------------|---------------|---------------------|-----------------------------|
| CAS-No. | type | | | | |
| Titanium dioxide < 1% | LC50 | Toxicity > Water | 48 h | Danio rerio | other guideline: |
| particles with diameter ≤ 10 | | solubility | | | |
| μm | | | | | |
| 13463-67-7 | | | | | |
| Titanium dioxide < 1% | NOEC | Toxicity > Water | 8 d | Danio rerio | OECD Guideline 212 (Fish, |
| particles with diameter ≤ 10 | | solubility | | | Short-term Toxicity Test on |
| μm | | | | | Embryo and Sac-Fry |
| 13463-67-7 | | | | | Stages) |
| Bis(2,2,6,6-tetramethyl-4- | LC50 | 4,4 mg/l | 96 h | Lepomis macrochirus | OECD Guideline 203 (Fish, |
| piperidyl) sebacate | | | | | Acute Toxicity Test) |
| 52829-07-9 | | | | | |
| Trimethoxyvinylsilane | LC50 | 191 mg/l | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, |
| 2768-02-7 | | | | | Acute Toxicity Test) |

Toxicity (Daphnia):

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

| Hazardous substances | Value | Value | Exposure time | Species | Method |
|--|-------|-----------------------------|---------------|---------------|--|
| CAS-No. | type | | | | |
| Titanium dioxide < 1% particles with diameter ≤ 10 µm 13463-67-7 | EC50 | Toxicity > Water solubility | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | EC50 | 8,58 mg/l | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Trimethoxyvinylsilane 2768-02-7 | EC50 | 168,7 mg/l | 48 h | Daphnia magna | EU Method C.2 (Acute Toxicity for Daphnia) |

Chronic toxicity to aquatic invertebrates

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

| Hazardous substances | Value | Value | Exposure time | Species | Method |
|---|-------|-----------|---------------|---------|--|
| CAS-No. | type | | | | |
| Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate 52829-07-9 | NOEC | 0,23 mg/l | 21 d | 1 0 | OECD 211 (Daphnia magna, Reproduction Test) |
| Trimethoxyvinylsilane 2768-02-7 | NOEC | 28,1 mg/l | 21 d | 1 0 | 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 | Value | Value | Exposure time | Species | Method |
|--|-------|-----------------------------|---------------|---------------------------------|--|
| CAS-No. | type | | | | |
| Titanium dioxide < 1% particles with diameter ≤ 10 µm 13463-67-7 | EC50 | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Titanium dioxide < 1% particles with diameter ≤ 10 µm 13463-67-7 | NOEC | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate 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 52829-07-9 | EC10 | 0,188 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Trimethoxyvinylsilane 2768-02-7 | EC50 | > 957 mg/l | 72 h | Desmodesmus subspicatus | EU Method C.3 (Algal Inhibition test) |
| Trimethoxyvinylsilane 2768-02-7 | NOEC | 957 mg/l | 72 h | Desmodesmus subspicatus | EU Method C.3 (Algal Inhibition test) |

Toxicity to microorganisms

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

| Hazardous substances | Value | Value | Exposure time | Species | Method |
|------------------------------|-------|------------------|---------------|-------------------------------|------------------------------|
| CAS-No. | type | | | | |
| Titanium dioxide < 1% | EC50 | Toxicity > Water | 3 h | activated sludge | ISO 8192 (Test for |
| particles with diameter ≤ 10 | | solubility | | | Inhibition of Oxygen |
| μm | | | | | Consumption by Activated |
| 13463-67-7 | | | | | Sludge) |
| Bis(2,2,6,6-tetramethyl-4- | EC50 | > 100 mg/l | 3 h | activated sludge, domestic | OECD Guideline 209 |
| piperidyl) sebacate | | | | | (Activated Sludge, |
| 52829-07-9 | | | | | Respiration Inhibition Test) |
| Trimethoxyvinylsilane | EC50 | > 100 mg/l | 3 h | activated sludge of a | OECD Guideline 209 |
| 2768-02-7 | | | | predominantly domestic sewage | (Activated Sludge, |
| | | | | | Respiration Inhibition Test) |

12.2. Persistence and degradability

| Hazardous substances | Result | Test type | Degradability | Exposure | Method |
|---|----------------------------|-----------|---------------|----------|---|
| CAS-No. | | | | time | |
| Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate 52829-07-9 | not readily biodegradable. | aerobic | 24 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| Trimethoxyvinylsilane 2768-02-7 | not readily biodegradable. | aerobic | 51 % | 28 d | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

| Hazardous substances CAS-No. | LogPow | Temperature | Method |
|-----------------------------------|--------|-------------|--|
| Bis(2,2,6,6-tetramethyl-4- | 0,35 | 25 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake |
| piperidyl) sebacate 52829-07-9 | | | Flask Method) |

12.5. Results of PBT and vPvB assessment

| Hazardous substances | PBT / vPvB |
|---|--|
| CAS-No. | |
| Titanium dioxide < 1% particles with diameter | According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not |
| ≤ 10 μm | be conducted for inorganic substances. |
| 13463-67-7 | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 52829-07-9 | Bioaccumulative (vPvB) criteria. |
| Trimethoxyvinylsilane | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 2768-02-7 | 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 or ID 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):

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

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

VOC content

5,9 %

Not applicable

(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:

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL:

EU EXPLD 1:

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

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (SDSinfo.Adhesive@henkel.com) prior to export to other territories than the European Union.

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.