



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

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TEROSON MS 222 BG

SDS No. : 632618

V003.0

Revision: 14.10.2021

printing date: 11.05.2022

Replaces version from: 03.05.2021

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

1.1. Product identifier

TEROSON MS 222 BG

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 AG & Co. KGaA

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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

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

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 Safety data sheet available on request.

2.3. Other hazards

None if used properly.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Sealant

Base substances of preparation:

Silane-modified polyether

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

| Hazardous components CAS-No. | EC Number REACH-RegNo. | content | Classification |
|--|-------------------------------|-------------|--|
| 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 |

**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.

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

No data available.

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

See section: Description of first aid measures

SECTION 5: Fire fighting 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
Germany

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|----------------------------------|-----|-------------------|-------------------------------------|---|-----------------|
| Limestone 1317-65-3 | | 10 | Exposure limit(s): | 2 | TRGS 900 |
| Limestone 1317-65-3 | | 1,25 | Exposure limit(s): | | TRGS 900 |
| Limestone 1317-65-3 | | | Short Term Exposure Classification: | Category II: substances with a resorptive effect. | TRGS 900 |
| Calcium carbonate 471-34-1 | | 1,25 | Exposure limit(s): | | TRGS 900 |
| Calcium carbonate 471-34-1 | | 10 | Exposure limit(s): | 2 | TRGS 900 |
| Calcium carbonate 471-34-1 | | | Short Term Exposure Classification: | Category II: substances with a resorptive effect. | TRGS 900 |

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---|---------------------------------|-----------------|-------------|-----|-----------|--------|---------|
| | | | mg/l | ppm | mg/kg | others | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | aqua (freshwater) | | 0,018 mg/l | | | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | aqua (marine water) | | 0,0018 mg/l | | | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | aqua (intermittent releases) | | 0,007 mg/l | | | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | sediment (freshwater) | | | | 29 mg/kg | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | sediment (marine water) | | | | 2,9 mg/kg | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | Soil | | | | 5,9 mg/kg | | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | sewage treatment plant (STP) | | 1 mg/l | | | | |

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/m ³ | |
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | General population | Inhalation | Long term exposure - systemic effects | | 0,31 mg/m ³ | |
| 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 | |

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; ≥ 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).
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

| | |
|--|--|
| Appearance | paste pasty beige |
| Odor | characteristic |
| Odour threshold | No data available / Not applicable |
| pH | Not applicable, Mixture reacts with water. |
| Melting point | No data available / Not applicable |
| Solidification temperature | No data available / Not applicable |
| Initial boiling point | No data available / Not applicable |
| Flash point | 130 °C (266 °F) |
| Evaporation rate | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Explosive limits | No data available / Not applicable |
| Vapour pressure | No data available / Not applicable |
| Relative vapour density: | No data available / Not applicable |
| Density (20 °C (68 °F)) | 1,3 g/cm ³ |
| Bulk density | No data available / Not applicable |
| Solubility | No data available / Not applicable |
| Solubility (qualitative) | No data available / Not applicable |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Auto-ignition temperature | No data available / Not applicable |
| Decomposition temperature | No data available / Not applicable |
| Viscosity | No data available / Not applicable |
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

9.2. Other information

No data available / Not applicable

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**11.1. Information on toxicological effects****Acute oral toxicity:**

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

| Hazardous substances CAS-No. | Value type | Value | Species | Method |
|---|------------|-------------|---------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | LD50 | 3.700 mg/kg | rat | OECD Guideline 423 (Acute Oral toxicity) |

Acute dermal toxicity:

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

| Hazardous substances CAS-No. | Value type | Value | Species | Method |
|---|------------|---------------|---------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | LD50 | > 3.170 mg/kg | rat | OECD Guideline 402 (Acute Dermal Toxicity) |

Acute inhalative toxicity:

No data available.

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 |
|---|----------------|---------------|---------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | not irritating | 24 h | rabbit | EPA OPP 81-5 (Acute Dermal Irritation) |

Serious eye damage/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 |
|---|-----------|---------------|---------|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | corrosive | 24 h | 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 CAS-No. | Result | Test type | Species | Method |
|---|-----------------|------------------------------|------------|---|
| 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) |

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) |

Carcinogenicity

No data available.

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 NOAEL F1 121 mg/kg | two-generation study | oral: feed | rat | OECD Guideline 443 (Extended One-Generation Reproductive Toxicity Study) |

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 CAS-No. | Result / Value | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|----------------|----------------------|--|---------|------------------|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | NOAEL 36 mg/kg | oral: feed | daily | rat | other guideline: |

Aspiration hazard:

No data available.

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 CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|------------|----------|---------------|---------------------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | LC50 | 4,4 mg/l | 96 h | Lepomis macrochirus | 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 CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|------------|-----------|---------------|---------------|--|
| 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) |

Chronic toxicity to aquatic invertebrates

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|------------|-----------|---------------|---------------|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 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 CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|------------|------------|---------------|---------------------------------|---|
| 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) |

Toxicity to microorganisms

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|------------|------------|---------------|----------------------------|--|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | EC50 | > 100 mg/l | 3 h | activated sludge, domestic | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

12.2. Persistence and degradability

| Hazardous substances CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|---|----------------------------|-----------|---------------|---------------|---|
| 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) |

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-piperidyl) sebacate 52829-07-9 | 0,35 | 25 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |

12.5. Results of PBT and vPvB assessment

| Hazardous substances CAS-No. | PBT/ vPvB |
|---|---|
| Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

12.6. 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. Transport in bulk according to Annex II of Marpol and the IBC Code

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): | dioctyltin oxide CAS 870-08-6 |
| Persistent organic pollutants (Regulation (EU) 2019/1021): | Not applicable |
| VOC content (2010/75/EU) | 0,5 % |

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

National regulations/information (Germany):

WGK: WGK 1: slightly hazardous to water (Ordinance on facilities for handling substances that are hazardous to water (AwSV))
Classification according to AwSV, Annex 1 (5.2)

Storage class according to TRGS 510: 11

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:

- H318 Causes serious eye damage.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Further information:

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