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



SDS No.: 505348
V002.0
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Pattex Repair Express new

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

**1.1. Product identifier**
Pattex Repair Express new

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use:
2-Component epoxy 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
Fax-no.: +44 (1442) 278071

ua-productsafety.uk@henkel.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):**

| | |
|---|---|
| Skin sensitizer | Category 1 |
| H317 May cause an allergic skin reaction. | |
| Skin irritation | Category 2 |
| H315 Causes skin irritation. | |
| Serious eye irritation | Category 2 |
| H319 Causes serious eye irritation. | |

**2.2. Label elements**

**Label elements (CLP):**

**Hazard pictogram:**

**Contains** Pentaerythritol-PO-mercaptoglycerol

| | |
|---|---|
| **Signal word:** | Warning |
| **Hazard statement:** | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation. |
| **Supplemental information** | EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust. |
| **Precautionary statement:** | P102 Keep out of reach of children.<br>P101 If medical advice is needed, have product container or label at hand. |
| **Precautionary statement: Prevention** | P280 Wear protective gloves. |
| **Precautionary statement: Response** | P302+P352 IF ON SKIN: Wash with plenty of soap and water. |
| **Precautionary statement: Disposal** | P501 Dispose of contents/container in accordance with national regulation. |

**2.3. Other hazards**
Persons suffering from allergic reactions to epoxides should avoid contact with the product.
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:**
2-Component epoxy putty
**Base substances of preparation:**
Epoxy resin
Polymercaptan
Inorganic fillers

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

| Hazardous components<br>CAS-No. | EC Number<br>REACH-Reg No. | content | Classification |
|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | 701-196-7<br>01-2120118957-46 | 10- 20 % | Skin Sens. 1B<br>H317<br>Aquatic Chronic 3<br>H412 |
| Titanium dioxide<br>13463-67-7 | 236-675-5<br>01-2119489379-17 | 1-< 5 % | |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | 202-013-9<br>01-2119560597-27 | 1-< 3 % | Skin Corr. 1C<br>H314<br>Acute Tox. 4; Oral<br>H302<br>Eye Dam. 1<br>H318 |

**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**

General information:
In case of adverse health effects seek medical advice.

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:
Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remain (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:
Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

**4.2. Most important symptoms and effects, both acute and delayed**
May cause an allergic skin reaction.

**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:**
carbon dioxide, foam, powder, water spray jet, fine water spray

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

**5.2. Special hazards arising from the substance or mixture**
In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) 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.
Avoid contact with skin and eyes.

**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**

Avoid skin and eye contact.

Hygiene measures:

Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

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

Keep only in original container.
Keep container tightly sealed.
Store in a cool, dry place.
Temperatures between + 5 °C and + 25 °C
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

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

2-Component epoxy adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Occupational Exposure Limits**

Valid for
Great Britain

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|---|---|---|---|---|
| Calcium sulfate<br>10101-41-4<br>[GYPSUM, INHALABLE DUST ] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| Calcium sulfate<br>10101-41-4<br>[GYPSUM, RESPIRABLE DUST ] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| 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 |
| Talc (Mg3H2(SiO3)4)<br>14807-96-6<br>[TALC, RESPIRABLE DUST] | | 1 | Time Weighted Average (TWA): | | EH40 WEL |
| Titanium dioxide<br>13463-67-7<br>[TITANIUM DIOXIDE, RESPIRABLE ] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Titanium dioxide<br>13463-67-7<br>[TITANIUM DIOXIDE, TOTAL INHALABLE] | | 10 | 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 |
|---|---|---|---|---|---|
| Calcium sulfate<br>10101-41-4<br>[GYPSUM] | | 4 | Time Weighted Average (TWA): | | IR_OEL |
| Calcium sulfate<br>10101-41-4<br>[GYPSUM] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE] | | 4 | Time Weighted Average (TWA): | | IR_OEL |
| Calcium carbonate<br>471-34-1<br>[CALCIUM CARBONATE] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Talc (Mg3H2(SiO3)4)<br>14807-96-6<br>[TALC] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Talc (Mg3H2(SiO3)4)<br>14807-96-6<br>[TALC] | | 0,8 | Time Weighted Average (TWA): | | IR_OEL |
| Titanium dioxide<br>13463-67-7<br>[TITANIUM DIOXIDE] | | 10 | Time Weighted Average (TWA): | | IR_OEL |

| | | | | | |
|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7<br>[TITANIUM DIOXIDE] | | 4 | Time Weighted Average (TWA): | | IR_OEL |

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

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | mg/l | ppm | mg/kg | others | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | aqua (freshwater) | | 0,07 mg/l | | | | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | freshwater - intermittent | | 0,12 mg/l | | | | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | aqua (marine water) | | 0,007 mg/l | | | | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | sediment (freshwater) | | | | 0,322 mg/kg | | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | sediment (marine water) | | | | 0,032 mg/kg | | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | sewage treatment plant (STP) | | 10 mg/l | | | | |
| Titanium dioxide 13463-67-7 | aqua (freshwater) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | aqua (marine water) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | sewage treatment plant (STP) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | sediment (freshwater) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | sediment (marine water) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | Soil | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | Aquatic (intermit. releases) | | | | | | no hazard identified |
| Titanium dioxide 13463-67-7 | Predator | | | | | | no hazard identified |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | aqua (freshwater) | | 0,046 mg/l | | | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | aqua (marine water) | | 0,005 mg/l | | | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | freshwater - intermittent | | 0,46 mg/l | | | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | marine water - intermittent | | 0,046 mg/l | | | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | sewage treatment plant (STP) | | 0,2 mg/l | | | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | sediment (freshwater) | | | | 0,262 mg/kg | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | sediment (marine water) | | | | 0,026 mg/kg | | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | Soil | | | | 0,025 mg/kg | | |

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

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|---|---|---|---|---|---|---|
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | Workers | inhalation | Long term exposure - systemic effects | | 22 mg/m3 | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | Workers | dermal | Long term exposure - systemic effects | | 2,7 mg/kg | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | General population | inhalation | Long term exposure - systemic effects | | 6,52 mg/m3 | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | General population | dermal | Long term exposure - systemic effects | | 1,61 mg/kg | |
| Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop 72244-98-5 | General population | oral | Long term exposure - systemic effects | | 1,9 mg/kg | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | Workers | inhalation | Long term exposure - systemic effects | | 0,53 mg/m3 | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | Workers | inhalation | Acute/short term exposure - systemic effects | | 2,1 mg/m3 | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | Workers | dermal | Long term exposure - systemic effects | | 0,15 mg/kg | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | Workers | dermal | Acute/short term exposure - systemic effects | | 0,6 mg/kg | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | General population | inhalation | Long term exposure - systemic effects | | 0,13 mg/m3 | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | General population | inhalation | Acute/short term exposure - systemic effects | | 0,13 mg/m3 | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | General population | dermal | Long term exposure - systemic effects | | 0,075 mg/kg | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | General population | dermal | Acute/short term exposure - systemic effects | | 0,075 mg/kg | |
| 2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2 | General population | oral | Long term exposure - systemic effects | | 0,075 mg/kg | |

**Biological Exposure Indices:**
None

**8.2. Exposure controls:**

Respiratory protection:
Not needed.

Hand protection:
Recommended are gloves made from Nitril rubber ( Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

Eye protection:
Goggles which can be tightly sealed.
Protective eye equipment should conform to EN166.

Skin protection:
Suitable protective clothing
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:
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 | Kneading mass<br>paste<br>white, up to, beige |
| Odor | specific |
| Odour threshold | No data available / Not applicable |
| pH | Not applicable |
| Melting point | No data available / Not applicable |
| Solidification temperature | No data available / Not applicable |
| Initial boiling point | No data available / Not applicable |
| Flash point | No data available / Not applicable |
| 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 | No data available / Not applicable |
| Bulk density | No data available / Not applicable |
| Solubility | No data available / Not applicable |
| Solubility (qualitative)<br>(23 °C (73.4 °F); Solvent: Water) | Insoluble |
| 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**
Reacts with acids, with strong oxidants and epoxides.

**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**
See section reactivity.

**10.6. Hazardous decomposition products**
None known.

## SECTION 11: Toxicological information

**General toxicological information:**
Cross-reactions with other epoxide compounds possible.
Persons suffering from allergic reactions to epoxides should avoid contact with the product.

**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<br>CAS-No. | Value type | Value | Species | Method |
|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | LD50 | 2.600 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| Titanium dioxide<br>13463-67-7 | LD50 | > 5.000 mg/kg | rat | OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | LD50 | 1.200 mg/kg | rat | not specified |

**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 type | Value | Species | Method |
|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | LD50 | > 10.200 mg/kg | rabbit | OECD Guideline 402 (Acute Dermal Toxicity) |
| Titanium dioxide<br>13463-67-7 | LD50 | >= 10.000 mg/kg | hamster | not specified |

**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 type | Value | Test atmosphere | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | LC50 | > 6,82 mg/l | dust | 4 h | rat | not specified |

**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 time | Species | Method |
|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | not irritating | 4 h | rabbit | equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | corrosive | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**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 time | Species | Method |
|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | not irritating | | 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 |
|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Titanium dioxide<br>13463-67-7 | not sensitising | Mouse local lymphnode assay (LLNA) | mouse | equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | not sensitising | Buehler test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | 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<br>CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Titanium dioxide<br>13463-67-7 | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Titanium dioxide<br>13463-67-7 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| Titanium dioxide<br>13463-67-7 | negative | oral: gavage | | mouse | 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<br>CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Sex | Method |
|---|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | not carcinogenic | inhalation | 24 m<br>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<br>CAS-No. | Result / Value | Test type | Route of application | Species | Method |
|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | NOAEL P > 1.000 mg/kg<br><br>NOAEL F1 > 1.000 mg/kg | | oral: gavage | 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 application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| Titanium dioxide<br>13463-67-7 | NOAEL 1.000 mg/kg | oral: gavage | 90 d<br>daily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

**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<br>CAS-No. | Value type | Value | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | LC50 | 87 mg/l | 96 h | Danio rerio | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Titanium dioxide<br>13463-67-7 | LC50 | Toxicity > Water solubility | 48 h | Leuciscus idus | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | LC50 | 153 mg/l | 96 h | Brachydanio rerio (new name: Danio rerio) | ISO 7346-1 (Determination of the Acute Lethal Toxicity of Substances to a Freshwater Fish [Brachydanio rerio Hamilton-Buchanan (Teleostei, Cyprinidae)] |

**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 type | Value | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | EC50 | 12 mg/l | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Titanium dioxide<br>13463-67-7 | EC50 | Toxicity > Water solubility | 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 type | Value | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | NOEC | 3,5 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 type | Value | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | EC50 | > 733 mg/l | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | NOEC | 338 mg/l | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Titanium dioxide<br>13463-67-7 | EC50 | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | EC50 | 84 mg/l | 72 h | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | NOEC | 6,25 mg/l | 72 h | 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 type | Value | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | EC50 | > 1.000 mg/l | 3 h | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Titanium dioxide<br>13463-67-7 | EC0 | Toxicity > Water solubility | 24 h | Pseudomonas fluorescens | DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | EC0 | 27 mg/l | 16 h | Pseudomonas putida | DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test) |

**12.2. Persistence and degradability**

| Hazardous substances<br>CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|---|---|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | not readily biodegradable. | aerobic | 5 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | not readily biodegradable. | aerobic | 4 % | 28 d | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

| Hazardous substances<br>CAS-No. | LogPow | Temperature | Method |
|---|---|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | 1,2 | 20 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | -0,66 | 21,5 °C | EPA OPPTS 830.7550 (Partition Coefficient, n-octanol / H2O, Shake Flask Method) |

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

| Hazardous substances<br>CAS-No. | PBT/ vPvB |
|---|---|
| Pentaerythritol-PO-mercaptoglycerol<br>72244-98-5 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Titanium dioxide<br>13463-67-7 | According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not be conducted for inorganic substances. |
| 2,4,6-tris(dimethylaminomethyl)phenol<br>90-72-2 | 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:
Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:
Use packages for recycling only when totally empty.

## 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 1005/2009/EC): | Not applicable |
| Prior Informed Consent (PIC) (Regulation 649/2012/EC): | Not applicable |
| Persistent Organic Pollutants (POPs) (Regulation 2019/1021/EC) : | Not applicable |

**EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)**: Not applicable

| | |
|---|---|
| VOC content (VOCV 814.018 VOC regulation CH) | 0 % |

**15.2. Chemical safety assessment**

A chemical safety assessment has not 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:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

**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 (ua-productsafety.de@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.

**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.**