



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

Page 1 of 12

BERGQUIST GAP FILLER TGF 1000 known as Gap Filler 1000

SDS No. : 590140  
V002.0

Revision: 14.01.2021

printing date: 17.02.2021

Replaces version from: 19.09.2019

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

#### 1.1. Product identifier

BERGQUIST GAP FILLER TGF 1000 known as Gap Filler 1000

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

Intended use:

Thermal Interface Material 1K Silicone

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

Henkel Ltd

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)1442 278497

### 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

This mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

None if used properly.

### 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.          | EC Number<br>REACH-Reg No.    | content        | Classification   |
|--|-------------------------------|----------------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | 209-136-7<br>01-2119529238-36 | 100- < 250 PPM | Flam. Liq. 3<br>H226<br>Repr. 2<br>H361f<br>Aquatic Chronic 1<br>H410<br>=====<br>EU. REACH Candidate List of Substances of<br>Very High Concern for Authorization<br>(SVHC)<br>M factor (Chron Aquat Tox): 10 |

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. If symptoms persist, seek medical advice.

##### Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

##### Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

##### 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

Prolonged or repeated contact may cause eye irritation.

Prolonged or repeated contact may cause skin irritation.

#### 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:

water, carbon dioxide, foam, powder

##### 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 (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) can be released.

Silicon dioxide

In case of fire, keep containers cool with water spray.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional information:**

In case of fire, keep containers cool with water spray.

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

Ensure adequate ventilation.

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**

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

For small spills wipe up with paper towel and place in container for disposal.

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**

See advice in section 8

Avoid skin and eye contact.

Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Good industrial hygiene practices should be observed.

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**

Ensure good ventilation/extraction.

Keep container tightly sealed.

Refer to Technical Data Sheet

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

Thermal Interface Material 1K Silicone

## 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 |
|--|-----|-------------------|------------------------------|--|-----------------|
| Aluminium hydroxide<br>21645-51-2<br>[DUST, RESPIRABLE DUST] |     | 4                 | Time Weighted Average (TWA): |  | EH40 WEL        |
| Aluminium hydroxide<br>21645-51-2<br>[DUST, INHALABLE DUST]  |     | 10                | Time Weighted Average (TWA): |  | EH40 WEL        |

#### Occupational Exposure Limits

Valid for  
Ireland

| Ingredient [Regulated substance]                          | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------------------|------------------------------|--|-----------------|
| Aluminium hydroxide<br>21645-51-2<br>[DUSTS NON-SPECIFIC] |     | 4                 | Time Weighted Average (TWA): |  | IR_OEL          |
| Aluminium hydroxide<br>21645-51-2<br>[DUSTS NON-SPECIFIC] |     | 10                | 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 |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | aqua<br>(freshwater)               |                 | 0,0015<br>mg/l  |     |            |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | aqua (marine<br>water)             |                 | 0,00015<br>mg/l |     |            |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | sewage<br>treatment plant<br>(STP) |                 | 10 mg/l         |     |            |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | sediment<br>(freshwater)           |                 |                 |     | 3 mg/kg    |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | sediment<br>(marine water)         |                 |                 |     | 0,3 mg/kg  |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | oral                               |                 |                 |     | 41 mg/kg   |        |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | Soil                               |                 |                 |     | 0,54 mg/kg |        |         |

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

| Name on list                             | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value                | Remarks |
|--|--------------------|-------------------|--|---------------|----------------------|---------|
| Octamethylcyclotetrasiloxane<br>556-67-2 | Workers            | inhalation        | Long term exposure - systemic effects        |               | 73 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | Workers            | inhalation        | Long term exposure - local effects           |               | 73 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | inhalation        | Long term exposure - systemic effects        |               | 13 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | inhalation        | Long term exposure - local effects           |               | 13 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | oral              | Long term exposure - systemic effects        |               | 3,7 mg/kg            |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | Workers            | inhalation        | Acute/short term exposure - local effects    |               | 73 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | Workers            | inhalation        | Acute/short term exposure - systemic effects |               | 73 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | inhalation        | Acute/short term exposure - local effects    |               | 13 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | inhalation        | Acute/short term exposure - systemic effects |               | 13 mg/m <sup>3</sup> |         |
| Octamethylcyclotetrasiloxane<br>556-67-2 | General population | oral              | Acute/short term exposure - systemic effects |               | 3,7 mg/kg            |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to &gt; 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq$  0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to &gt; 480 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq$  0.4 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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

**Skin protection:**

Wear 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                                   | liquid<br>paste<br>grey            |
| Odor   | slightly                           |
| Odour threshold                              | No data available / Not applicable |
| pH   | No data available / 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                                  | > 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                                      | No data available / Not applicable |
| Bulk density                                 | No data available / Not applicable |
| Solubility                                   | No data available / Not applicable |
| Solubility (qualitative)<br>(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 oxidants, acids and lyes

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity

**10.4. Conditions to avoid**

Stable under normal conditions of storage and use.

**10.5. Incompatible materials**

See section reactivity.

**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  |
|--|------------|---------------|---------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | LD50       | > 4.800 mg/kg | rat     | equivalent or similar to OECD Guideline 401 (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  |
|--|------------|---------------|---------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | LD50       | > 2.375 mg/kg | rat     | equivalent or similar to 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 CAS-No.             | Value type | Value   | Test atmosphere | Exposure time | Species | Method   |
|--|------------|---------|-----------------|---------------|---------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | LC50       | 36 mg/l | dust/mist       | 4 h           | rat     | OECD Guideline 403 (Acute 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  |
|--|----------------|---------------|---------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | not irritating |               | rabbit  | equivalent or similar to 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 CAS-No.             | Result         | Exposure time | Species | Method   |
|--|----------------|---------------|---------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | not irritating |               | rabbit  | equivalent or similar to 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                                  |
|--|-----------------|------------------------------|------------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | 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 CAS-No.             | Result   | Type of study / Route of administration       | Metabolic activation / Exposure time | Species | Method   |
|--|----------|---|--------------------------------------|---------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | negative | bacterial gene mutation assay                 | with and without                     |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)  |
| octamethylcyclotetrasiloxane<br>556-67-2 | negative | in vitro mammalian chromosome aberration test | with and without                     |         | equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)    |
| octamethylcyclotetrasiloxane<br>556-67-2 | negative | mammalian cell gene mutation assay            | with and without                     |         | equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)       |
| octamethylcyclotetrasiloxane<br>556-67-2 | negative | inhalation                                    |                                      | rat     | equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test) |
| octamethylcyclotetrasiloxane<br>556-67-2 | negative | oral: gavage                                  |                                      | rat     | equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal 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   |
|--|-------------------------------------|----------------------|----------------------|---------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | NOAEL P 300 ppm<br>NOAEL F1 300 ppm | two-generation study | inhalation           | rat     | equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction 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   |
|--|-----------------|----------------------|--|---------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | LOAEL 35 ppm    | inhalation           | 6 h nose only inhalation<br>5 days/week for 13 weeks | rat     | OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)                            |
| octamethylcyclotetrasiloxane<br>556-67-2 | NOAEL 960 mg/kg | dermal               | 3 w<br>5 d/w   | rabbit  | equivalent or similar to OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |

**Aspiration hazard:**

No data available.



## SECTION 12: Ecological information

### General ecological information:

Do not empty into drains / surface water / ground 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   |
|--|---------------|--------------------------------|---------------|--|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | NOEC          | 0,0044 mg/l                    | 93 d          | Salmo gairdneri (new name:<br>Oncorhynchus mykiss) | EPA OPPTS 797.1600 (Fish<br>Early Life Stage Toxicity<br>Test) |
| octamethylcyclotetrasiloxane<br>556-67-2 | LC50          | Toxicity > Water<br>solubility | 96 h          | Oncorhynchus mykiss                                | EPA OTS 797.1400 (Fish<br>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  |
|--|---------------|--------------------------------|---------------|---------------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | EC50          | Toxicity > Water<br>solubility | 48 h          | Daphnia magna | EPA OTS 797.1300<br>(Aquatic Invertebrate Acute<br>Toxicity Test, Freshwater<br>Daphnids) |

#### 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   |
|--|---------------|----------|---------------|---------------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | NOEC          | 7.9 µg/l | 21 d          | Daphnia magna | EPA OTS 797.1330<br>(Daphnid Chronic Toxicity<br>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   |
|--|---------------|--------------------------------|---------------|---|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | EC50          | Toxicity > Water<br>solubility | 96 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | EPA OTS 797.1050 (Algal<br>Toxicity, Tiers I and II) |
| octamethylcyclotetrasiloxane<br>556-67-2 | EC10          | 0,022 mg/l                     | 96 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | EPA OTS 797.1050 (Algal<br>Toxicity, Tiers I and II) |

#### 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  |
|--|---------------|--------------------------------|---------------|------------------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | EC50          | Toxicity > Water<br>solubility | 3 h           | activated sludge | ISO 8192 (Test for<br>Inhibition of Oxygen<br>Consumption by Activated<br>Sludge) |

### 12.2. Persistence and degradability

| Hazardous substances<br>CAS-No.          | Result                     | Test type | Degradability | Exposure time | Method  |
|--|----------------------------|-----------|---------------|---------------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | not readily biodegradable. | aerobic   | 3,7 %         | 29 d          | OECD Guideline 310 (Ready BiodegradabilityCO <sub>2</sub> in Sealed Vessels (Headspace Test)) |

### 12.3. Bioaccumulative potential

| Hazardous substances<br>CAS-No.          | Bioconcentration factor (BCF) | Exposure time | Temperature | Species             | Method  |
|--|-------------------------------|---------------|-------------|---------------------|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | 12.400                        | 28 d          |             | Pimephales promelas | EPA OTS 797.1520 (Fish Bioconcentration Test-Rainbow Trout) |

### 12.4. Mobility in soil

| Hazardous substances<br>CAS-No.          | LogPow | Temperature | Method   |
|--|--------|-------------|--|
| octamethylcyclotetrasiloxane<br>556-67-2 | 6,488  | 25,1 °C     | OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-Stirring Method) |

### 12.5. Results of PBT and vPvB assessment

| Hazardous substances<br>CAS-No.          | PBT / vPvB  |
|--|---|
| octamethylcyclotetrasiloxane<br>556-67-2 | 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 in accordance with local and national regulations.

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

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09\* waste adhesives and sealants containing organic solvents and other dangerous substances

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.

**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 < 5 %  
(2010/75/EC)

**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:

H226 Flammable liquid and vapor.

H361f Suspected of damaging fertility.

H410 Very toxic 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.

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**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.**



## Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 9

BERGQUIST GAP FILLER TGF 1000 known as Gap Filler 1000

SDS No. : 550910  
V002.0  
Revision: 14.01.2021  
printing date: 17.02.2021  
Replaces version from: 17.09.2018

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

#### 1.1. Product identifier

BERGQUIST GAP FILLER TGF 1000 known as Gap Filler 1000

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

Intended use:  
Thermal Interface Material 1K Silicone

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

Henkel Ltd  
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)1442 278497

### 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

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.  
None if used properly.

### 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.                                    | EC Number<br>REACH-Reg No. | content  | Classification       |
|--|----------------------------|----------|----------------------|
| Siloxanes and Silicones, dimethyl,<br>hydrogen-termi<br>70900-21-9 |                            | 25- 50 % | Flam. Liq. 3<br>H226 |

**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. If symptoms persist, seek medical advice.

**Skin contact:**

Rinse with running water and soap.

Obtain medical attention if irritation persists.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

**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

Prolonged or repeated contact may cause eye irritation.

Prolonged or repeated contact may cause skin irritation.

#### 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:**

water, carbon dioxide, foam, powder

**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 (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) can be released.

Silicon dioxide

In case of fire, keep containers cool with water spray.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional information:**

In case of fire, keep containers cool with water spray.

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

Ensure adequate ventilation.

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**

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

For small spills wipe up with paper towel and place in container for disposal.

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**

See advice in section 8

Avoid skin and eye contact.

Hygiene measures:

Good industrial hygiene practices should be observed.

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**

Ensure good ventilation/extraction.

Keep container tightly sealed.

Refer to Technical Data Sheet

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

Thermal Interface Material 1K Silicone

## 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 |
|--|-----|-------------------|------------------------------|--|-----------------|
| Aluminium hydroxide<br>21645-51-2<br>[DUST, RESPIRABLE DUST] |     | 4                 | Time Weighted Average (TWA): |  | EH40 WEL        |
| Aluminium hydroxide<br>21645-51-2<br>[DUST, INHALABLE DUST]  |     | 10                | Time Weighted Average (TWA): |  | EH40 WEL        |

#### Occupational Exposure Limits

Valid for  
Ireland

| Ingredient [Regulated substance]                          | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------------------|------------------------------|--|-----------------|
| Aluminium hydroxide<br>21645-51-2<br>[DUSTS NON-SPECIFIC] |     | 4                 | Time Weighted Average (TWA): |  | IR_OEL          |
| Aluminium hydroxide<br>21645-51-2<br>[DUSTS NON-SPECIFIC] |     | 10                | Time Weighted Average (TWA): |  | IR_OEL          |

#### Biological Exposure Indices:

None

### 8.2. Exposure controls:

Engineering controls:  
Ensure good ventilation/extraction.

Respiratory protection:  
Ensure adequate ventilation.  
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area  
Filter type: A (EN 14387)

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):  
nitrile rubber (NBR; >= 0.4 mm thickness)  
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):  
nitrile rubber (NBR; >= 0.4 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:**

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.  
Protective eye equipment should conform to EN166.

**Skin protection:**

Wear 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                                   | liquid<br>paste<br>white           |
| Odor   | slightly                           |
| Odour threshold                              | No data available / Not applicable |
| pH   | No data available / 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                                  | > 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                                      | No data available / Not applicable |
| Bulk density                                 | No data available / Not applicable |
| Solubility                                   | No data available / Not applicable |
| Solubility (qualitative)<br>(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 oxidants, acids and lyes

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity

**10.4. Conditions to avoid**

Stable under normal conditions of storage and use.

**10.5. Incompatible materials**

See section reactivity.

**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:**

No data available.

**Acute dermal toxicity:**

No data available.

**Acute inhalative toxicity:**

No data available.

**Skin corrosion/irritation:**

No data available.

**Serious eye damage/irritation:**

No data available.

**Respiratory or skin sensitization:**

No data available.

**Germ cell mutagenicity:**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity:**

No data available.

**STOT-single exposure:**

No data available.

**STOT-repeated exposure::**

No data available.

**Aspiration hazard:**

No data available.

**SECTION 12: Ecological information****General ecological information:**

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

**12.1. Toxicity****Toxicity (Fish):**

No data available.

**Toxicity (Daphnia):**

No data available.

**Chronic toxicity to aquatic invertebrates**

No data available.

**Toxicity (Algae):**

No data available.

**Toxicity to microorganisms**

No data available.

**12.2. Persistence and degradability**

The product is not biodegradable.

No substance data available.

**12.3. Bioaccumulative potential**

No substance data available.

No data available.

**12.4. Mobility in soil**

Cured adhesives are immobile.

No substance data available.

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

This mixture does not contain any substances that are assessed to be a PBT or vPvB.

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09\* waste adhesives and sealants containing organic solvents and other dangerous substances

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.

**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 < 5 %  
(2010/75/EC)

**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:  
H226 Flammable liquid and vapor.

**Further information:**

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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.

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