

**Safety data sheet**  
 According to 1907/2006/EC, Article 31

Printing date: 18.06.2019

version n° 1

Revision: 18.06.2019

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

- **1.1 Product identifier**
- Trade name: **TR FLEX S1**
- Article number: K0337.010., 18PJ100122
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
 No further relevant information available.
- Application of the preparation: Adhesives
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 KERAKOLL S.p.A.  
 Via dell'Artigianato, 9  
 41049 Sassuolo (MODENA) ITALY  
 Tel. +39 0536 816511 Fax. +39 0536 816581  
 info@kerakoll.com
- **E-mail address of the competent person responsible for the SDS:** safety@kerakoll.com
- **Informing department:** Product safety department
- **1.4 Emergency telephone number:**  
 +441527578000 (Kerakoll UK)  
 +39-0536-816511 (Kerakoll Italy)

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
 Portland Cement  
 (Contain reducing agents: Cr VI < 0,0002%)  
 Flue Dust
- **Hazard statements**  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.

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H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

**- Precautionary statements**

P102 Keep out of reach of children.

P260 Do not breathe dust.

P280 Wear protective gloves / eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**- 2.3 Other hazards**

**- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

**- 3.2 Mixtures**

- **Description:** Mixture consisting of the following components.

**- Dangerous components:**

CAS: 65997-15-1 EINECS: 266-043-4	Portland Cement (Contain reducing agents: Cr VI < 0,0002%) Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥25-≤50%
CAS: 68475-76-3 EINECS: 270-659-9 Reg.nr.: 01-2119486767-17-XXXX	Flue Dust Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥1-<2.5%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

**- 4.1 Description of first aid measures**

- **After inhalation** In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

- **After eye contact**

Rinse opened eye for several minutes under running water. Then consult doctor.

- **After swallowing** In case of persistent symptoms consult doctor.

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

No further relevant information available.

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

No further relevant information available.

**SECTION 5: Firefighting measures**

**- 5.1 Extinguishing media**

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

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

No further relevant information available.

**- 5.3 Advice for firefighters**

- **Protective equipment:** Put on breathing apparatus.

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### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Put on breathing apparatus.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Use neutralising agent.  
Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Thorough dedusting.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep breathing equipment ready.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

#### - 8.1 Control parameters

#### - Components with limit values that require monitoring at the workplace:

##### 14808-60-7 Quartz ( $\text{Ø} > 10\mu\text{m}$ ) (50-75%)

BOELV (Unione Europea)	Long-term value: 0.1* mg/m <sup>3</sup> *respirable fraction
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##### 65997-15-1 Portland Cement (Contain reducing agents: Cr VI < 0,0002%) (25-50%)

WEL (Gran Bretagna)	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
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##### 9004-65-3 Cellulose, 2-hydroxypropyl methyl ether (<0.2%)

TWA (Unione Europea)	Short-term value: 10 mg/m <sup>3</sup>
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##### 14808-60-7 Quartz ( $\text{Ø} < 10\mu\text{m}$ ) (<0.1%)

BOELV (Unione Europea)	Long-term value: 0.1* mg/m <sup>3</sup> *respirable fraction
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##### 7488-55-3 tin sulphate (<0.01%)

WEL (Gran Bretagna)	Short-term value: 4 mg/m <sup>3</sup> Long-term value: 2 mg/m <sup>3</sup> as Sn
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IOELV (Unione Europea)	Long-term value: 2 mg/m <sup>3</sup> as Sn
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- **Additional information:** Respirable crystalline silica (fraction) less than 0,1%
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
 Keep away from foodstuffs, beverages and food.  
 Take off immediately all contaminated clothing  
 Wash hands during breaks and at the end of the work.  
 Avoid contact with the skin.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.
- **Protection of hands:**  
 Protective gloves.  
 Impervious gloves
- **Material of gloves**  
 Rubber gloves  
 PVC or PE gloves
- **Eye protection:** Tightly sealed safety glasses.

## SECTION 9: Physical and chemical properties

### - 9.1 Information on basic physical and chemical properties

#### - General Information

- |                           |                 |
|---------------------------|-----------------|
| - <b>Appearance:</b>      | Solid.          |
| - <b>Form:</b>            | Powder          |
| - <b>Colour:</b>          | Grey            |
| - <b>Odour:</b>           | Odourless       |
| - <b>Odour threshold:</b> | Not determined. |

- |                             |    |
|-----------------------------|----|
| - <b>pH-value at 20 °C:</b> | 11 |
|-----------------------------|----|

#### - Change in condition

- |   |                |
|---|----------------|
| - <b>Melting point/freezing point:</b>            | Not determined |
| - <b>Initial boiling point and boiling range:</b> | Not determined |

- |                       |                                 |
|-----------------------|---------------------------------|
| - <b>Flash point:</b> | Not applicable<br>Not flammable |
|-----------------------|---------------------------------|

- |  |                 |
|--|-----------------|
| - <b>Inflammability (solid, gaseous)</b> | Not determined. |
|--|-----------------|

- |                                     |                 |
|-------------------------------------|-----------------|
| - <b>Decomposition temperature:</b> | Not determined. |
|-------------------------------------|-----------------|

- |                               |                              |
|-------------------------------|------------------------------|
| - <b>Self-inflammability:</b> | Product is not selfigniting. |
|-------------------------------|------------------------------|

- |                                |                           |
|--------------------------------|---------------------------|
| - <b>Explosive properties:</b> | Product is not explosive. |
|--------------------------------|---------------------------|

#### - Critical values for explosion:

- |                 |                 |
|-----------------|-----------------|
| - <b>Lower:</b> | Not determined. |
| - <b>Upper:</b> | Not determined. |

- |                           |                 |
|---------------------------|-----------------|
| - <b>Vapour pressure:</b> | Not applicable. |
|---------------------------|-----------------|

- |                           |                        |
|---------------------------|------------------------|
| - <b>Density at 20 °C</b> | 1.29 g/cm <sup>3</sup> |
|---------------------------|------------------------|

- |                           |                 |
|---------------------------|-----------------|
| - <b>Relative density</b> | Not determined. |
|---------------------------|-----------------|

- |                         |                 |
|-------------------------|-----------------|
| - <b>Vapour density</b> | Not applicable. |
|-------------------------|-----------------|

- |                           |                 |
|---------------------------|-----------------|
| - <b>Evaporation rate</b> | Not applicable. |
|---------------------------|-----------------|

#### - Solubility in / Miscibility with

- |                 |         |
|-----------------|---------|
| - <b>Water:</b> | Soluble |
|-----------------|---------|

- |  |                 |
|--|-----------------|
| - <b>Partition coefficient: n-octanol/water:</b> | Not determined. |
|--|-----------------|

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- **Viscosity:**
  - dynamic: Not applicable.
  - kinematic: Not applicable.
- **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### - LD/LC50 values that are relevant for classification:

##### 65997-15-1 Portland Cement

(Contain reducing agents: Cr VI < 0,0002%)

Oral	LD50	mg/kg (rat)
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##### 68475-76-3 Flue Dust

Oral	LD50	>2,000 Practically nontoxic mg (Rat)
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Dermal	LD50	>2,000 mg/kg (mouse)
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Inhalative	LC50/4 h	6.04 mg/l (mouse)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### - 12.1 Toxicity

##### - Aquatic toxicity:

##### 68475-76-3 Flue Dust

CE50 48h	100 mg/L (Daphnia)
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CEr50 96h	28.2 mg/L (Alghe/piante acquatiche)
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EC50 72h	22.4 mg/L (Alghe/piante acquatiche)
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- **12.2 Persistence and degradability** No further relevant information available.

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- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key number:** 16 03 03 - inorganic wastes containing dangerous substances

#### - European waste catalogue

HP 4	Irritant - skin irritation and eye damage
HP 5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 13	Sensitising

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

### SECTION 14: Transport information

- |  |   |
|--|---|
| - <b>14.1 UN-Number</b>  | The product is not dangerous according to ADR, ADN, IMDG, IATA. |
| - <b>ADR, ADN, IMDG, IATA</b>  | Void  |
| - <b>14.2 UN proper shipping name</b>  |   |
| - <b>ADR, ADN, IMDG, IATA</b>  | Void  |
| - <b>14.3 Transport hazard class(es)</b>   |   |
| - <b>ADR, ADN, IMDG, IATA</b>  |   |
| - <b>Class</b>   | Void  |
| - <b>14.4 Packing group</b>  |   |
| - <b>ADR, IMDG, IATA</b>   | Void  |
| - <b>14.5 Environmental hazards:</b>   | Not applicable.   |
| - <b>14.6 Special precautions for user</b>                                       | Not applicable.   |
| - <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.   |
| - <b>UN "Model Regulation":</b>  | Void  |

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## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
  - **REGULATION (EC) No 1907/2006 ANNEX XVII**  
The product contains Cr(VI) below limit set out in Annex XVII, entry 47  
Conditions of restriction: 47
  - **National regulations**  
The product is subject to classification in accordance with the prevailing version of the regulations on hazardous materials.
  - **Additional classification according to Decree on Hazardous Materials, Annex II:** -
  - **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - **Other regulations, limitations and prohibitive regulations**  
Directive 2003/53/EC. For the maintenance of the reducing agent activity, see condition and conservation time indicated on the pack.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

- **Relevant phrases**  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.
- **Department issuing data specification sheet:** SCP
- **Contact:** Dr. B. Brina c/o Kerakoll S.p.A. tel. +39-0536-816511 fax +39-0536-816581
- **Others regulations**  
The safety data sheet has been drawn up in accordance with European directives 1999/45/EC, 2001/58/EC, 2001/59/EC and 2001/60/EC.
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Skin Sens. 1: Skin sensitisation – Category 1  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- \* **Data compared to the previous version altered.**

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