



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 27.06.2017



Version number 12

Revision: 27.06.2017

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

- **1.1 Product identifier**
- **Trade name: KEIM RESTAURO-TOP**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Repair mortar
- **Uses advised against** All other uses are not recommended.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
KEIM MINERAL PAINTS LTD  
Santok Building / Deer Park Way, Donnington Wood GB-Telford, Shropshire TF2 7NA  
Tel +44 1952 231 250 / Fax +44 1952 231 251  
www.keimpaints.co.uk / sales@keimpaints.co.uk
- **Further information obtainable from:**  
David Pratt  
Telefon: +44 1952 231250  
E-Mail: sales@keimpaints.co.uk
- **1.4 Emergency telephone number:**  
GBK GmbH Global Regulatory Compliance  
Emergency number: +49(0)6132/84463

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Dam. 1 H318 Causes serious eye damage.  
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:**  
Cement, portland, chemicals
- **Hazard statements**  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

(Contd. on page 2)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 1)

**Precautionary statements**

- P261 Avoid breathing dust.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face 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.  
P315 Get immediate medical advice/attention.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P362 Take off contaminated clothing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.

**2.3 Other hazards**

This Product contains cement. Cement produces an alkaline reaction with moisture or water. Avoid contact with eyes and prolonged skin contact.

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

- **Description:** Preparation of cement, inorganic fillers and pigments

**Dangerous components:**

CAS: 65997-15-1 EINECS: 266-043-4	Cement, portland, chemicals ☠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	10-25%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17-xxxx	titanium dioxide substance with a Community workplace exposure limit	2.5-10%

- **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**

- **General information:** When seeing the doctor we suggest to present this safety data sheet.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Do not use solvents or thinners.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse mouth and throat well with water.  
Do not induce vomiting; call for medical help immediately.

(Contd. on page 3)



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 2)

- **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:**  
Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.
- **5.2 Special hazards arising from the substance or mixture**  
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
In case of fire do not breathe smoke, fumes and vapours.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Avoid contact with skin and eyes.  
Avoid formation of dust.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Respect the protection rules (see section 7 a. 8).  
Product forms slippery surface when combined with water.
- **6.2 Environmental precautions:**  
Do not allow product to reach soil, sewage system or any water course.  
Follow local governmental rules and regulations.
- **6.3 Methods and material for containment and cleaning up:**  
Close drainages (Risk of blocking)  
Danger of slipping!  
Avoid formation of dust.  
Ensure adequate ventilation.  
Pick up mechanically.  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.
- **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 disposal information.

GB

(Contd. on page 4)



### Safety data sheet according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

Trade name: KEIM RESTAURO-TOP

(Contd. of page 3)

#### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Avoid contact with skin and eyes.

Keep receptacles tightly sealed.

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

Any unavoidable deposit of dust must be regularly removed.

See item 8 for information about suitable protective equipment and technical precautions. Respect the protection rules.

· **Information about fire - and explosion protection:**

The product is not flammable.

No special measures required.

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

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep in the original containers in a cool and dry place.

Store only in unopened original receptacles.

· **Information about storage in one common storage facility:** Do not store together with acids.

· **Further information about storage conditions:**

Store in dry conditions.

Protect from humidity and water.

Avoid dust formations and deposits.

Keep container tightly sealed.

Protect from heat and direct sunlight.

· **Storage class:** 13

· **7.3 Specific end use(s)** No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**65997-15-1 Cement, portland, chemicals**

WEL Long-term value: 10\* 4\*\* mg/m<sup>3</sup>  
\*inhalable dust \*\*respirable dust

**13463-67-7 titanium dioxide**

WEL Long-term value: 10\* 4\*\* mg/m<sup>3</sup>  
\*total inhalable \*\*respirable

· **DNELs**

**13463-67-7 titanium dioxide**

Oral	Long-term - systemic effects, consumer	700 mg/kg/day (consumer)
Inhalative	Long-term - local effects, worker	10 mg/m <sup>3</sup> (worker)

(Contd. on page 5)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 4)

**· PNECs****13463-67-7 titanium dioxide**

Aquatic compartment - freshwater	0.127 mg/l (freshwater)
Aquatic compartment - marine water	1 mg/l (marine water)
Aquatic compartment - water, intermittent releases	0.61 mg/l (not specified)
Aquatic compartment - sediment in freshwater	1,000 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water	100 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	100 mg/kg dw (soil)
Sewage treatment plant	100 mg/l (sewage treatment plant)

**· Additional information:** The lists valid during the making were used as basis.**· 8.2 Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

**· Respiratory protection:**

In a dusty environment wear suitable facemask.

Filter: FFP2

**· Protection of hands:**

Protective gloves

Alkaline resistant gloves

**· Material of gloves**

suitable material e.g.:

Nitrile impregnated cotton-gloves

Recommended thickness of the material:  $\geq 0.5$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**· Penetration time of glove material**Value for the permeation: Level  $\geq 6$  (480 min)

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**· Eye protection:**

In a dusty environment wear protective goggles.

Tightly sealed goggles

**· Body protection:**

Protective work clothing

After contact with skin wash thoroughly with water and apply lotion.

(Contd. on page 6)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

Trade name: KEIM RESTAURO-TOP

(Contd. of page 5)

· Limitation and supervision of exposure into the environment See Section 12 and 6.2

### SECTION 9: Physical and chemical properties

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

##### · General Information

##### · Appearance:

· Form:	powdery, grainy
· Colour:	Different, according to colouring.
· Odour:	Odourless
· Odour threshold:	Not determined.

· pH-value at 20 °C:	11.5-13.5* with water mixed
----------------------	--------------------------------

##### · Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Not applicable.

· Flash point:	Not applicable.
----------------	-----------------

· Flammability (solid, gas):	Not applicable.
------------------------------	-----------------

· Ignition temperature:	Not determined.
-------------------------	-----------------

· Decomposition temperature:	Not determined.
------------------------------	-----------------

· Auto-ignition temperature:	Product is not selfigniting.
------------------------------	------------------------------

· Explosive properties:	Product does not present an explosion hazard.
-------------------------	---

##### · Explosion limits:

· Lower:	Not applicable.
· Upper:	Not applicable.

· Oxidising properties	Not applicable.
------------------------	-----------------

· Vapour pressure:	Not applicable
--------------------	----------------

· Density at 20 °C:	1.2-1.5* g/cm <sup>3</sup> Bulk density
---------------------	--

· Relative density	Not determined.
--------------------	-----------------

· Vapour density	Not applicable.
------------------	-----------------

· Evaporation rate	Not applicable.
--------------------	-----------------

· Solubility in / Miscibility with water at 20 °C:	< 2 g/l (Ca(OH) <sub>2</sub> ) miscible
---	--

· Partition coefficient: n-octanol/water:	Not applicable.
---	-----------------

##### · Viscosity:

· Dynamic:	Not applicable.
------------	-----------------

(Contd. on page 7)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 6)

- |                                |  |
|--------------------------------|--|
| <b>Kinematic:</b>              | Not applicable.  |
| · <b>9.2 Other information</b> | * The values are for freshly produced material and may change with the time. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** Reacts with water alkaline and hardens.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **Thermal decomposition / conditions to be avoided:**  
Stable at environment temperature.  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Humidity
- **10.5 Incompatible materials:** Acids
- **10.6 Hazardous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.

### 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 relevant for classification:**

#### 13463-67-7 titanium dioxide

Oral	LD50	>5,000 mg/kg (rat) (OECD 425)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.8 mg/l (rat)
	NOAEL	3,500 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **during inhalation:** Irritating to respiratory system.
- **during swallowing:** Irritant effect possible
- **Respiratory or skin sensitisation**  
Product is reduced in chromate. Within the indicated storage time sensitization is not expected.
- **Other information (about experimental toxicology):**  
Experimental analysis are not available.  
The product was not tested. The statements on toxicology have been derived from the properties of the individual components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** not applicable
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.

(Contd. on page 8)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 7)

- **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:

##### **13463-67-7 titanium dioxide**

NOEC	10 mg/kg (daphnia)
EC 50/72 h	>10,000 mg/l (algae) 16 mg/l (freshwater alga)
LC 50/96 h	>10,000 mg/l (marine fish) >100 mg/l (freshwater fish)
LC 50/48h	>100 mg/l (daphnia)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **AOX-indication:**  
Due to the substance of content which do not include organic jointed halogens, the product can not take influence on the AOX-load of the waste water.
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**  
The product contains TiO<sub>2</sub>.
- **General notes:**  
At present there are no ecotoxicological assessments.  
Do not allow product to reach ground water, water course or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **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 with household garbage. Do not allow product to reach sewage system.  
Disposal must be made according to official regulations.

(Contd. on page 9)





## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 8)

**· European waste catalogue**

17 01 01 | concrete

- **Uncleaned packaging:**
- **Recommendation:**  
Non contaminated packagings may be recycled.  
Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary with cleansing agents.

**SECTION 14: Transport information**

· <b>14.1 UN-Number</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.2 UN proper shipping name</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b> · <b>ADR, 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> · <b>Marine pollutant:</b>	No
· <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>Transport/Additional information:</b>	No dangerous good in sense of these transport regulations.
· <b>UN "Model Regulation":</b>	Void

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
For information on labelling please refer to section 2 of this document.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 10)



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 27.06.2017

Version number 12

Revision: 27.06.2017

**Trade name: KEIM RESTAURO-TOP**

(Contd. of page 9)

- **Other regulations, limitations and prohibitive regulations**
- **Please note:**
  - TRGS 200 (Germany)
  - TRGS 500 (Germany)
  - TRGS 510 (Germany)
  - TRGS 900 (Germany)
- **Substances of very high concern (SVHC) according to REACH, Article 57** not applicable
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H335 May cause respiratory irritation.
- **Department issuing SDS:** KEIMFARBEN Germany, Product safety department
- **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)
  - TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - SVHC: Substances of Very High Concern
  - vPvB: very Persistent and very Bioaccumulative
  - EC10: Effective concentration at 10% mortality rate.
  - EC50: Half maximal effective concentration.
  - LC10: Lethal concentration at 10% mortality rate.
  - NOEC: No observed effect concentration.
  - REACH: Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) No.1907/2006)
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- **\* Data compared to the previous version altered.**