



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

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 preparation** 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
Telford
Shropshire
TF2 7NA
United Kingdom
Tel: +44 1952 231250
Fax: +44 1952 231251
Url: <http://www.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 Gefahrgut Büro GmbH
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**
Eye Dam. 1 H318 Causes serious eye damage.
Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Xi; Irritant
R37/38-41: Irritating to respiratory system and skin. Risk of serious damage to eyes.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 1)

- **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.

- **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P271 Use only outdoors or in a well-ventilated area.

P261 Avoid breathing dust.

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.

P362 Take off contaminated clothing and wash before reuse.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- **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 ☒ Xi R37/38-41 ☒ 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 (IV)-oxide substance with a Community workplace exposure limit	2.5-10%

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

GB

(Contd. on page 3)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 2)

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.
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 out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **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 breath 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.

(Contd. on page 4)



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

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 3)

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.

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 ³
	*inhalable dust **respirable dust

13463-67-7 Titanium (IV)-oxide

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

(Contd. on page 5)

GB



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 4)

· DNELs		
13463-67-7 Titanium (IV)-oxide		
Inhalative	Long-term - local effects, worker	10 mg/m ³ (worker)

· PNECs		
13463-67-7 Titanium (IV)-oxide		
Aquatic compartment - freshwater		0.127 mg/l (freshwater)
Aquatic compartment - marine water		1 mg/l (marine water)
Aquatic compartment - sediment in freshwater		1000 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water		100 mg/kg sed dw (sediment marine water)
Aquatic compartment - water, intermittent releases		0.61 mg/l (freshwater)
Terrestrial compartment - soil		100 mg/kg dw (soil)

· **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.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

· **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: ≥ 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 ≥ 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

(Contd. on page 6)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 5)

- **Body protection:**
Protective work clothing
After contact with skin wash thoroughly with water.

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/Melting range: Undetermined.
Boiling point/Boiling range: Not applicable.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature:

Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not applicable.
Upper: Not applicable.

· Oxidizing properties: Not applicable.

· Vapour pressure: Not applicable

· Density: Not determined.

· Bulk density at 20 °C: ~ 1.40 * g/cm³

· 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)₂)
miscible

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

· Viscosity:

Dynamic: Not applicable.
Kinematic: Not applicable.

(Contd. on page 7)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 6)

· **9.2 Other information**

* 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**
- **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:**
- | | | |
|--|------|------------------------------|
| · LD/LC50 values relevant for classification: | | |
| 13463-67-7 Titanium (IV)-oxide | | |
| Oral | LD50 | >5000 mg/kg (rat) (OECD 425) |
| Dermal | LD50 | >5000 mg/kg (rabbit) |
- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
 - **during inhalation:** Irritating to respiratory system.
 - **during swallowing:** Irritant effect possible
 - **Sensitization:**
Product is reduced in chromate. Within the indicated storage time sensitization is not expected.
 - **Other information (about experimental toxicology):**
Experimental analysis are not available.
 - **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

SECTION 12: Ecological information

- **12.1 Toxicity**
 - **Aquatic toxicity:**
- | | |
|---------------------------------------|--|
| 13463-67-7 Titanium (IV)-oxide | |
| EC 50/72 h | >10000 mg/l (algae) (ISO 10253; Skeletonerna costatum) |

(Contd. on page 8)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 7)

LC 50/48h	16 mg/l (freshwater alga) (statisch, EPA-600-9/78-018) >10000 mg/l (invertebrate marine organisms) (Acartia tonsa; ISO 14669, ISO 5667-16)
LC 50/96 h	> 100 mg/l (daphnia) (statisch, OECD 202) >10000 mg/l (marine fish) (semi-statisch , OECD 203) > 100 mg/l (freshwater fish) (statisch, OECD 203)
NOEC	28d; \geq 100000 mg/kg (bacteria) (semi-statisch, ASTM 1706)

- **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:**
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**
The product contains TiO₂.
- **General notes:**
At present there are no ecotoxicological assessments.
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 together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

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 together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number	
ADR, IMDG, IATA	Void

14.2 UN proper shipping name	
ADR, IMDG, IATA	Void

(Contd. on page 9)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 8)

<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class Void
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA Void
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: No
<ul style="list-style-type: none"> · 14.6 Special precautions for user Not applicable.
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: No dangerous good in sense of these transport regulations.
<ul style="list-style-type: none"> · UN "Model Regulation": -

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Please note:**
 - TRGS 200 (Germany)
 - TRGS 500 (Germany)
 - TRGS 510 (Germany)
 - TRGS 900 (Germany)
- **Product-Code/Giscode:** ZP1
- **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.
 - R37/38 Irritating to respiratory system and skin.
 - R41 Risk of serious damage to eyes.
- **Department issuing MSDS:** KEIMFARBEN Germany, Product safety department
- **Contact:** Mrs. Popescu

(Contd. on page 10)

GB



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

Printing date 14.10.2013

Version number 10

Revision: 14.10.2013

Trade name: KEIM Restauro-Top

(Contd. of page 9)

· 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 Harmonized 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)
VOC: Volatile Organic Compounds (USA, EU)
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
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)

· * Data compared to the previous version altered.

GB