



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

Printing date 23.11.2020

Version number 12.0

Revision: 23.11.2020

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

- **1.1 Product identifier**
- **Trade name:** **KEIM RESTAURO-LASUR**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Thin layer paint / glaze, sol-silicate-based
- **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.keim.com / 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**  
The product is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**  
EUH210 Safety data sheet available on request.  
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **2.3 Other hazards** Alkaline product. Avoid contact with skin and eyes.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mineral fillers, potassium water glass, silica sol, acrylate dispersion

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· <b>Dangerous components:</b>		
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119486799-10-xxxx	titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$ ] 	2.5-10%
CAS: 12001-26-2 EC number: 601-648-2	Mica substance with a Community workplace exposure limit	2.5-10%
CAS: 1312-76-1 EINECS: 215-199-1 Reg.nr.: 01-2119456888-17-xxxx	Silicic acid, potassium salt  Specific concentration limits: Skin Irrit. 2; H315: C $\geq 40 \%$ Eye Irrit. 2; H319: C $\geq 40 \%$	$\leq 2.5\%$

· **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

##### · **General information:**

No special measures required.

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.

#### · 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

· **Specila protective equipment:** Wear self-contained respiratory protective device.

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· **Additional information**

In case of fire do not breathe smoke, fumes and vapours.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Respect the protection rules (see section 7 a. 8).

Avoid contact with skin and eyes.

Ensure adequate ventilation

· **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:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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**

Keep receptacles tightly sealed.

Avoid contact with skin and eyes.

Do not inhale aerosols.

See item 8 (8.2) 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:**

Store only in unopened original receptacles.

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

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

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from frost.

Protect from heat and direct sunlight.

· **Storage class:** 12

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· **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:**

**13463-67-7 titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq 10 \mu\text{m}$ ]**

WEL	Long-term value: $10^* 4^{**} \text{ mg/m}^3$ *total inhalable **respirable
-----	--------------------------------------------------------------------------------

**12001-26-2 Mica**

WEL	Long-term value: $10^* 0.8^{**} \text{ mg/m}^3$ *total inhalable **respirable
-----	----------------------------------------------------------------------------------

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Do not inhale aerosols.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

· **Respiratory protection:**

Use suitable respiratory protective device only when aerosol or mist is formed.

Filter: P

· **Protection of hands:** Protective gloves

· **Material of gloves**

suitable material e.g.:

Nitrile impregnated cotton-gloves

Natural rubber, NR

Recommended thickness of the material:  $\geq 0.6 \text{ mm}$

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 16523-1:2015 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:** Safety glasses

· **Body protection:** Protective work clothing

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· **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:

Fluid

##### · Colour:

Different, according to colouring.

##### · Odour:

Odourless

##### · pH-value at 20 °C:

11.2\*

##### · Change in condition

##### · Melting point/freezing point:

~ 0 °C

##### · Initial boiling point and boiling range:

100 °C

##### · Flash point:

&gt;100 °C

##### · 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 at 20 °C:

~23 hPa

##### · Density at 20 °C:

1.1-1.3\* g/cm<sup>3</sup>

##### · Relative density

Not determined

##### · Vapour density

Not applicable.

##### · Evaporation rate

Not applicable.

##### · Solubility in / Miscibility with

##### · water:

Miscible

##### · Partition coefficient: n-octanol/water:

Not applicable

##### · Viscosity:

##### · Dynamic at 20 °C:

250-600\* mPas

##### · Kinematic:

Not determined

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**· 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** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **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 [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq 10 \mu\text{m}$ ]**

Inhalative	ATE mix (4h)	>5 mg/l (inhalation)
	ATE mix	>2,000 mg/kg (dermal) >2,000 mg/kg (orally)
	NOAEL	3,500 mg/kg /Oral (rat) (90d)

**1312-76-1 Silicic acid, potassium salt**

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4 h	>5 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Frequent persistent contact with the skin may cause skin irritation.
- **Serious eye damage/irritation**  
In case of longer exposure, slightly irritating effect to the eyes is possible.
- **during inhalation:** Irritant effect possible.
- **during swallowing:** Irritant effect possible
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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.

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**· Repeated dose toxicity****13463-67-7 titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq 10 \mu\text{m}$ ]**Inhalative | NOAEC | 10 mg/m<sup>3</sup> (rat) (90d)

- **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.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **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 [in powder form containing 1 % or more of particles with aerodynamic diameter  $\leq 10 \mu\text{m}$ ]**

NOEC	$\geq 100,000$ mg/kg (sediment fresh water)
EC50	$>100$ mg/kg (freshwater alga) (OECD 201)
EC 50	$>10,000$ mg/l (algae) (ISO 10253)
LC 50	$>10,000$ mg/l (marine fish) (OECD 203)
	$>1,000$ mg/l (freshwater fish) (EPA-540/9-85-006)
	$>1,000$ mg/l (daphnia) (OECD 202)

**1312-76-1 Silicic acid, potassium salt**

NOEC	$>1$ mg/l (fish)
	$>1$ mg/l (invertebrates)
EC 50/48h	$>100$ mg/l (daphnia) (OECD 202)
EC 50/72 h	$>100$ mg/l (algae)
LC 50/96 h	$>100$ mg/l (fish) (DIN EN ISO 7346-2)
EC 0	$>1,000$ mg/l (activated sludge) (30min)

- **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>.

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- **General notes:**  
The statements on ecotoxicology have been derived from the properties of the individual components.  
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.
- **European waste catalogue**

08 01 12	waste paint and varnish other than those mentioned in 08 01 11
----------	----------------------------------------------------------------
- **Uncleaned packaging:**
- **Recommendation:** 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><br>· <b>ADR, IMDG, IATA</b>                                    | Void           |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                      | Void           |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b><br>· <b>Class</b> | Void           |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                | Void           |
| · <b>14.5 Environmental hazards:</b><br>· <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 |

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- |                                            |                                                            |
|--------------------------------------------|------------------------------------------------------------|
| · <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.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**  
None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **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.  
H319 Causes serious eye irritation.  
H351 Suspected of causing cancer.
- **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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern

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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 Irrit. 2: Serious eye damage/eye irritation – Category 2

Carc. 2: Carcinogenicity – Category 2

· **\* Data compared to the previous version altered.**

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