



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

Printing date 10.05.2023

Version number 13.0 (replaces version 12.0)

Revision: 10.05.2023

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:**
KEIMFARBEN GMBH
Keimstraße 16 / 86420 Diedorf
Tel. +49 (0)821 4802-0
Fax +49 (0)821 4802-210
www.keim.com / info@keimfarben.de
- **Further information obtainable from:**
Product safety department
Telefon: 49(0)821/4802-138
E-Mail: sdb.info@keimfarben.de
- **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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· Dangerous components:

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 $\leq 10 \mu\text{m}$] Carc. 2, H351	2.5-10%
CAS: 1312-76-1 EINECS: 215-199-1 Reg.nr.: 01-2119456888-17-xxxx	Silicic acid, potassium salt Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Specific concentration limits: Skin Irrit. 2; H315: C $\geq 40\%$ Eye Irrit. 2; H319: C $\geq 40\%$ STOT SE 3; H335: C $\geq 40\%$	$\leq 2.5\%$

· Additional information:

Route of exposure: Inhalation/contraction not given.
Alveolar particles (diameter $\leq 10 \mu\text{m}$) bound in the paint matrix.
This product contains $<1\%$ respirable crystalline quartz.
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.

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- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Special protective equipment:** Wear self-contained respiratory protective device.
- **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 and 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.

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- Protect from heat and direct sunlight.
- **Storage class:** 12
- **GISCode** BSW40 Beschichtungsstoffe, wasserbasiert, alkalisch
- **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 $\leq 10 \mu\text{m}$]

AGW (Germany)	Long-term value: $1.25 \cdot 10^{**} \text{ mg/m}^3$ 2(II);*alveolengängig**einatembar; AGS, DFG, Y
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14808-60-7 Quartz (SiO₂)

MAK (Germany)	alveolengängige Fraktion
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- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Individual protection measures, such as 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

· **Hand protection** 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 ≥ 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/face protection** Safety glasses

· **Body protection:** Protective work clothing

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- **Environmental exposure controls**
See Section 12 and 6.2
No further relevant information available.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

- **Physical state** Fluid
- **Colour:** Different, according to colouring.
- **Odour:** Odourless
- **Melting point/freezing point:** ~0 °C
- **Boiling point or initial boiling point and boiling range** 100 °C
- **Flammability** Not applicable
- **Lower and upper explosion limit**
- **Lower:** Not applicable
- **Upper:** Not applicable
- **Flash point:** >100 °C
- **Ignition temperature:** Not determined
- **Decomposition temperature:** Not determined
- **pH at 20 °C** 11.2*
- **Viscosity:**
- **Kinematic viscosity** Not determined
- **Dynamic at 20 °C:** 250-600* mPas
- **Solubility**
- **water:** Miscible
- **Partition coefficient n-octanol/water (log value)** Not applicable
- **Vapour pressure at 20 °C:** ~23 hPa
- **Density and/or relative density**
- **Density at 20 °C:** 1.1-1.3* g/cm³
- **Relative density** Not determined
- **Vapour density** Not applicable.

· 9.2 Other information

- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Change in condition**
- **Softening point/range**
- **Oxidising properties:** Not applicable

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· Evaporation rate	Not applicable.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

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 hazard classes as defined in Regulation (EC) No 1272/2008**
- **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 (inhalative)
	ATE mix	>2,000 mg/kg (dermal)

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	NOAEL	>2,000 mg/kg (orally) 3,500 mg/kg /Oral (rat) (90d)
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- **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.

- **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.

- **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.

- **Subacute to chronic toxicity:**

- **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/m³ (rat) (90d)

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Not applicable

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

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 (Freshwater sediment) Hyalella azteca
EC50	>100 mg/kg (Freshwater algae) (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)

- **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.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable
 - **vPvB:** Not applicable
- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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 TiO₂.
- **General notes:**

At present there are no ecotoxicological assessments.
The statements on ecotoxicology have been derived from the properties of the individual components.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow product to reach ground water, water course or sewage system.

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

SECTION 14: Transport information

- | | |
|---|------|
| · 14.1 UN number or ID number
· ADR, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | Void |

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· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable
· Transport/Additional information:	No dangerous good in sense of these transport regulations.
· UN "Model Regulation":	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.
- **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**
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.
- **REGULATION (EU) 2019/1148**
- **Regulation (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
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
- **Product-Code/Giscode:** BSW40

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- **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.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.

- **Department issuing SDS:** KEIMFARBEN Germany, Product safety department

- **Version number of previous version:** 12.0

- **Abbreviations and acronyms:**

- ADR: Accord relatif au transport international 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
- vPvB: very Persistent and very Bioaccumulative
- AGW: Arbeitsplatzgrenzwert (Germany)
- 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
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- * **Data compared to the previous version altered.**