



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:**
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 $\leq 10 \mu\text{m}$] 	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**· Special protective equipment:** Wear self-contained respiratory protective device.**· Additional information**

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

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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

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

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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
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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

· 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 ≥ 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

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

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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: >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/cm³
- 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
- 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.

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- **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.

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 ³ (rat) (90d)
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- **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.

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

1312-76-1 Silicic acid, potassium salt

NOEC	$> 1 \text{ mg/l}$ (fish)
	$> 1 \text{ mg/l}$ (invertebrates)
EC 50/48h	$> 100 \text{ mg/l}$ (daphnia) (OECD 202)
EC 50/72 h	$> 100 \text{ mg/l}$ (algae)
LC 50/96 h	$> 100 \text{ mg/l}$ (fish) (DIN EN ISO 7346-2)
EC 0	$> 1,000 \text{ mg/l}$ (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_2 .
- **General notes:**
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
At present there are no ecotoxicological assessments.
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

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· **12.6 Other adverse effects** No further relevant information available.

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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**

· **ADR, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR, IMDG, IATA** Void

· **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 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

· **Transport/Additional information:**

No dangerous good in sense of these transport regulations.

· **UN "Model Regulation":**

Void

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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
- **Product-Code/Giscode:** BSW40
- **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
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)

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Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Carc. 2: Carcinogenicity – Category 2

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

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