Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.11.2025 Version number 13.1 (replaces version 13.0) Revision: 21.11.2025

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

· **1.1 Product identifier**

· **Trade name: KEIM SOLDALIT-ME**
· **Nanoform:** This product contains nanoforms.
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Application of the substance / the mixture** Sol-silicate paint with photocatalytic effect.
· **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

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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
· **2.3 Other hazards** Alkaline product. Avoid contact with skin and eyes.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:**
Aqueous solution of silicic acid potassium salt, silica sol, acrylic polymer, mineral fillers, pigments, additives.

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· **Dangerous components:**		
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 ≥40 % Eye Irrit. 2; H319: C ≥ 40 % STOT SE 3; H335: C ≥ 40 %	0.1-≤2.5%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide Nanoform: Number-based particle size distribution - d10: ≥2 - ≤70 - d50: ≥3 - ≤ 99 - d90: ≥4 - ≤200 Shape: Spheroidal Structure: crystalline forms Crystallinity: crystalline nanoform Surface-to-mass ratio: ≥10 - ≤ 700	0.1-≤2.5%

· **Additional information:**
Route of exposure: Inhalation/contraction not given.
Alveolar particles (diameter ≤ 10 µm) bound in the paint matrix.
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.

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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.
Cool endangered receptacles with water spray.
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**
Avoid contact with skin and eyes.
Ensure adequate ventilation
Particular danger of slipping on leaked/spilled product.
Respect the protection rules (see section 7 and 8).
· **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.
Flush rests with sufficient amount of water.
· **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.

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· **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:** Not required.
· **Further information about storage conditions:**
Store in a cool place.
Protect from frost.
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.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNELs**		
13463-67-7 titanium dioxide		
Inhalative	Long-term - systemic effects	0.8 mg/m³ (worker)
1312-76-1 Silicic acid, potassium salt		
Oral	Long-term - systemic effects	0.74 mg/kg bw/day (consumer)
Dermal	Long-term - systemic effects	0.74 mg/kg bw/day (consumer)
		1.49 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects	1.38 mg/m³ (consumer)
		5.61 mg/m³ (worker)

· **PNECs**	
1312-76-1 Silicic acid, potassium salt	
Aquatic compartment - freshwater	7.5 mg/l (Freshwater)
Aquatic compartment - marine water	1 mg/l (Seawater)
Aquatic compartment - water, intermittent releases	7.5 mg/l (Freshwater)
Sewage treatment plant	348 mg/l (Sewage treatment plant)

· **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.

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Immediately remove all soiled and contaminated clothing.

· **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Filter: P2

· **Hand protection** Protective gloves

· **Material of gloves**
suitable material e.g.:
Nitrile impregnated cotton-gloves
Recommended thickness of the material: ≥ 0.5 mm
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.4 mm
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.7 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** Tightly sealed goggles

· **Body protection:**
Protective work clothing
After contact with skin wash thoroughly with water and apply lotion.

· **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**	Liquid
· **Colour:**	Different, according to colouring.
· **Odour:**	Odourless
· **Odour threshold:**	Not determined
· **Melting point/freezing point:**	Not determined
· **Boiling point or initial boiling point and boiling range**	>100 °C
· **Flammability**	Not applicable
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable

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· **Upper:**	Not applicable
· **Flash point:**	Not applicable
· **Auto-ignition temperature:**	Not determined
· **Decomposition temperature:**	Not determined
· **pH at 20 °C**	~11*
· **Viscosity:**	
· **Kinematic viscosity**	Not determined
· **Dynamic at 20 °C:**	2.000-2.800* mPas
· **Solubility**	
· **water:**	Fully 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:**	1.4-1.6* g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not applicable
· **Particle characteristics**	See section 3.
· **9.2 Other information**	*The values are for freshly produced material and may change with the time.
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **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
· **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

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· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void
· **Other safety characteristics**	
· **Photocatalytic properties**	The product has photocatalytic properties.

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:**
In case of fire, the following can be released:
Silicon dioxid (SiO_2)
Carbon oxides (COx)
No hazardous decomposition products if stored and handled as prescribed.

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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		
Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>6.82 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, irritating effect 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.

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· **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:**
· **CMR effects (carcinogenity, 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	
ErC50/72h	>100 mg/l (algae)
LC 50/96 h	>1,000 mg/l (Pimephales promelas)

· **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.
· **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, BaSO4, ZnS.
· **General notes:**
The statements on ecotoxicology have been derived from the properties of the individual components.
Do not allow product to reach ground water, water course or sewage system.
At present there are no ecotoxicological assessments.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

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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

· **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
· **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**

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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· **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**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Not relevant

· **ANNEX I EXPORT SUBSTANCES DECLARABLE FOR EXPLOSIVES in quantities > 1%.**
None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

· **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
· **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.

· **Department issuing SDS:** KEIMFARBEN Germany, Product safety department
· **Version number of previous version:** 13.0
· **Abbreviations and acronyms:**
BOELV: Binding Occupational Exposure Limit Values
IOELV : Indicative Occupational Exposure Limit Values
OELV: Occupational Exposure Limit Value
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

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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
AGW: Arbeitsplatzgrenzwert (Germany)
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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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