



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

Printing date 21.04.2017

Version number 11

Revision: 21.04.2017

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

- **1.1 Product identifier**
- **Trade name: KEIM ECOSIL-ME**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Silicate interior paint
- **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
- **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:** Aqueous solution of alkali silicate and mineral mixture

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· Dangerous components:

CAS: 1314-98-3 EINECS: 215-251-3 Reg.nr.: 01-2119475779-15-xxxx	zinc sulphide substance with a Community workplace exposure limit	2.5-10%
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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

In case of fire, the following can be released:

carbon oxide (CO_x)**· 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 breathe smoke, fumes and vapours.

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.

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Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

· **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).

Ensure adequate ventilation.

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.

Ensure good ventilation/exhaustion at the workplace.

Do not inhale aerosols.

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:**

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:**

Protect from frost.

Store in a cool place.

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:

1314-98-3 zinc sulphide

MAK (Germany)	Long-term value: 0.1A* 2E** mg/m ³ *alveolengängig; **einatembar
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· DNELs

1314-98-3 zinc sulphide

Inhalative	Acute - local effects, worker	5 mg Zn/m ³ (worker) (insoluble Zn)
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· PNECs

1314-98-3 zinc sulphide

Aquatic compartment - freshwater	(Zn) 0.0206 mg/l (freshwater) (PNEC acid)
Aquatic compartment - marine water	(Zn) 0.0061 mg/l (marine water) (PNEC acid)
Aquatic compartment - sediment in freshwater	(Zn) 235.6 mg/kg sed dw (sediment fresh water) (Faktor 0,5; EZB 2008)
Aquatic compartment - sediment in marine water	(Zn) 113 mg/kg sed dw (sediment marine water) (Faktor 0,5; EZB 2008)
Terrestrial compartment - soil	(Zn) 106.8 mg/kg dw (soil) (Faktor 3; EZB 2008)
Sewage treatment plant	(Zn) 0.052 mg/l (sewage treatment plant)

· **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

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

PVC or PE 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.

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- **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing
- **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:** Pasty
 - **Colour:** Different, according to colouring.
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value at 20 °C:** 11.2*
- **Change in condition**
 - **Melting point/freezing point:** Undetermined.
 - **Initial boiling point and boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **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.
- **Vapour pressure at 20 °C:** ~23 hPa
- **Density at 20 °C:** 1.45-1.65* g/cm³
- **Relative density** Not determined.
- **Vapour density** Not applicable
- **Evaporation rate** Not applicable

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- | | |
|--|--|
| · Solubility in / Miscibility with water: | miscible |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: | |
| Dynamic at 20 °C: | 1500-1900* 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.
- **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:
carbon oxide (COx)
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:

1314-98-3 zinc sulphide

Oral	LD50	> 2000 mg/kg (rat)
Inhalative	LC50/4 h	> 5.7 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Frequent persistent contact with the skin may cause skin irritation.
- **Serious eye damage/irritation** slightly irritant
- **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.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** not applicable

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- **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:

1314-98-3 zinc sulphide

EC 50/48h (Zn) 204 mg/l (daphnia) (pH <7)

EC 50/72 h (Zn) 144 mg/l (algae) (pH >7 - 8,5)

- **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 BaSO₄, TiO₂, ZnS.
- **General notes:**
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

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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

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.
- **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:** BSW10
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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.

· **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)

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

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)

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

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