



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

Printing date 05.08.2016

Version number 10

Revision: 05.08.2016

### 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:**  
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.keimpaints.co.uk / 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
- **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	zinc sulphide	2.5-10%
EINECS: 215-251-3		
Reg.nr.: 01-2119475779-15-xxxx		

### 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 out mouth and then drink plenty of 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<sub>x</sub>)**· 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**
  - No dangerous substances are released.
  - 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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

##### · **DNELs**

###### **1314-98-3 zinc sulphide**

Inhalative	Acute - local effects, worker	5 mg Zn/m <sup>3</sup> (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:  $\geq 0.5$  mm

PVC or PE gloves

Recommended thickness of the material:  $\geq 0.5$  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  $\geq 6$  (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

### SECTION 9: Physical and chemical properties

**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:**

<b>Form:</b>	Pasty
<b>Colour:</b>	Different, according to colouring.
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**· pH-value at 20 °C:** 11.3\***· Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

**· Flash point:** Not applicable.**· Ignition temperature:** Not determined.**· Decomposition temperature:** Not determined.**· Self-igniting:** Product is not selfigniting.**· Danger of explosion:** Product does not present an explosion hazard.**· Explosion limits:**

<b>Lower:</b>	Not applicable.
<b>Upper:</b>	Not applicable.

**· Oxidising properties** Not applicable**· Vapour pressure at 20 °C:** ~23 hPa

<b>· Density at 20 °C:</b>	1.55* g/cm <sup>3</sup>
<b>· Relative density</b>	Not determined.
<b>· Vapour density</b>	Not applicable
<b>· Evaporation rate</b>	Not applicable

**· Solubility in / Miscibility with water:** miscible

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- **Partition coefficient (n-octanol/water):** Not applicable
- **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 (CO<sub>x</sub>)  
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 (carcinogenity, 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:

##### 1314-98-3 zinc sulphide

EC 50/48h (Zn) 204 mg/l (daphnia) (pH &lt;7)

EC 50/72 h (Zn) 144 mg/l (algae) (pH &gt;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 BaSO<sub>4</sub>, TiO<sub>2</sub>, ZnS.
- **General notes:**  
At present there are no ecotoxicological assessments.  
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** 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.

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### 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: M-SK01
- 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.

- Department issuing SDS: KEIMFARBEN Germany, Product safety department

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**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
- REACH: Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) No.1907/2006)

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