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

Printing date 10.09.2021 Version number 13.0 (replaces version 12.0) Revision: 10.09.2021

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

· **1.1 Product identifier**

· **Trade name: KEIM FIXATIV**
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Application of the substance / the mixture** Silicate-based binder, diluent and fixing agent
· **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.keim.com / 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

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## SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Aqueous solution of alkali silicate

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· **Dangerous components:**

| | | |
|---|---|---|
| CAS: 1312-76-1<br>EINECS: 215-199-1<br>Reg.nr.: 01-2119456888-17-xxxx | Silicic acid, potassium salt<br>Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335<br>Specific concentration limits:<br>Skin Irrit. 2; H315: C ≥ 40 %<br>Eye Irrit. 2; H319: C ≥ 40 %<br>STOT SE 3; H335: C ≥ 40 % | ≥10-≤25% |

· **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 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.
· **For safety reasons unsuitable extinguishing agents:** Water
· **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
· **5.3 Advice for firefighters**
· **Specila protective equipment:** Wear self-contained respiratory protective device.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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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**
Avoid contact with skin and eyes.
Ensure adequate ventilation
Respect the protection rules (see section 7 a. 8).
· **6.2 Environmental precautions:**
Do not allow product to reach soil, sewage system or any water course.
Follow local governmental rules and regulations.
Dilute with plenty of water.
· **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.

· **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

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· **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **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.
· **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: ≥ 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.
· **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** Goggles recommended during refilling
· **Body protection:** Protective work clothing
· **Environmental exposure controls**
See Section 12 and 6.2
No further relevant information available.

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## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Physical state** Fluid

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| | |
|---|---|
| · **Colour:** | yellow, clear |
| · **Odour:** | Odourless |
| · **Odour threshold:** | Not determined |
| · **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:** | Not applicable |
| · **Auto-ignition temperature:** | Product is not selfigniting. |
| · **Decomposition temperature:** | Not determined |
| · **pH at 20 °C** | ~11.1 |
| · **Viscosity:** | |
| · **Kinematic viscosity** | Not determined |
| · **Dynamic:** | Not determined. |
| · **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:** | 1.1-1.2* g/cm³ |
| · **Relative density** | Not determined |
| · **Vapour density** | Not applicable. |

| | |
|---|---|
| · **9.2 Other information** | * The values are for freshly produced material and may change with the time. |
| · **Appearance:** | |
| · **Form:** | Liquid |
| · **Important information on protection of health and environment, and on safety.** | |
| · **Ignition temperature:** | Not determined |
| · **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 |

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| | |
|---|---|
| · **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**
· **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
· **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

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· **11.2 Information on other hazards**

| · **Endocrine disrupting properties** |
|---|
| None of the ingredients is listed. |

## SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **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:**
According to our current data base the product does not consist of any heavy metals or substances of EU-directives 76/464/EWG.
· **General notes:**
Do not allow product to reach ground water, water course or sewage system.
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

## 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** | |
|---|---|
| 06 02 99 | wastes not otherwise specified |

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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· **Recommended cleansing agents:** Water, if necessary with cleansing agents.

## SECTION 14: Transport information

| | |
|---|---|
| · **14.1 UN number or ID number**<br>· **ADR, IMDG, IATA** | Void |
| · **14.2 UN proper shipping name**<br>· **ADR, IMDG, IATA** | Void |
| · **14.3 Transport hazard class(es)**<br>· **ADR, IMDG, IATA**<br>· **Class** | Void |
| · **14.4 Packing group**<br>· **ADR, IMDG, IATA** | Void |
| · **14.5 Environmental hazards:**<br>· **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.

· **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
· **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.

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· **Relevant phrases**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

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

· **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)
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)
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.**