



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.04.2014


Version number 2

Revision: 03.04.2014

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

- **1.1 Product identifier**
- **Trade name: KEIM Concrete Cleaner**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Cleaning agent/ Detergent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
KEIM MINERAL PAINTS LTD  
Santok Building  
Deer Park Way  
Donnington Wood  
Telford  
Shropshire  
TF2 7NA  
United Kingdom  
Tel: +44 1952 231250  
Fax: +44 1952 231251  
Url: <http://www.keimpaints.co.uk>
- **Further information obtainable from:**  
David Pratt  
Telefon: +44 1952 231250  
E-Mail: [sales@keimpaints.co.uk](mailto:sales@keimpaints.co.uk)
- **1.4 Emergency telephone number:**  
GBK Gefahrgut Büro GmbH  
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**  
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
C; Corrosive  
R34: Causes burns.
  - **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
  - **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
- 

GHS05
- **Signal word** Danger

(Contd. on page 2)

GB



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 1)

- **Hazard-determining components of labelling:**  
fluorosilicic acid
- **Hazard statements**  
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**  
 P102 Keep out of reach of children.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P309 IF exposed or if you feel unwell:  
 P315 Get immediate medical advice/attention.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Cleaning agent on the basis of silicic acid

- **Dangerous components:**

CAS: 16961-83-4 EINECS: 241-034-8 Index number: 009-011-00-5	fluorosilicic acid C R34 Skin Corr. 1B, H314	10-25%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 Reg.nr.: 01-2119457610-43-XXXX	ethanol F R11 Flam. Liq. 2, H225;  Eye Irrit. 2, H319	≤ 2.5%
CAS: 69011-36-5 EC number: 931-138-8	Isotridecanol, ethoxylated (≥2.5 - ≤7 EO) Xi R41 Eye Dam. 1, H318;  Aquatic Chronic 3, H412	≤ 2.5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
When seeing the doctor we suggest to present this safety data sheet.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
Keep affected person warm and quiet.

(Contd. on page 3)



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 2)

- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Seek medical treatment.
- **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:  
Hydrogen fluoride (HF)  
silicon tetrafluoride  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
In case of fire do not breath smoke, fumes and vapours.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:**  
Do not allow product to reach soil, sewage system or any water course.  
Follow local governmental rules and regulations.  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
Fill in labelled, lockable containers.  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

(Contd. on page 4)

GB



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

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 3)

- 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**  
Avoid contact with skin and eyes.  
Keep receptacles tightly sealed.  
Prevent formation of aerosols.  
Ensure good ventilation/exhaustion at the workplace.  
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:**  
Keep container tightly closed. Do not empty container under pressure, non-pressure vessel! Close opened containers carefully and store upright, to prevent any leakage.  
glass and silicate containing materials are affected  
Store only in the original receptacle.  
Drip pan to be provided.
- **Information about storage in one common storage facility:**  
Do not store together with alkalis (caustic solutions).  
Store away from metals.
- **Further information about storage conditions:**  
Store in a cool place.  
Protect from frost.  
Keep container tightly sealed.  
Protect from heat and direct sunlight.
- **Storage class:** 8BL
- **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:**
- |                        |  |
|------------------------|--|
| <b>64-17-5 ethanol</b> |  |
| WEL                    | Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm |
- **Additional information:** The lists valid during the making were used as basis.
  - **8.2 Exposure controls**
  - **Personal protective equipment:**
  - **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.

(Contd. on page 5)

GB



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 4)

- Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 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.  
 Combination filter B2/P2
  - **Protection of hands:** Acid resistant gloves
  - **Material of gloves**  
 suitable material e.g.:  
 Chloroprene rubber, CR  
 Recommended thickness of the material:  $\geq 0.5$  mm  
 Natural rubber, NR  
 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.
  - **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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:**  
 Tightly sealed goggles  
 if applicable face protection
  - **Body protection:** Acid resistant protective clothing

## SECTION 9: Physical and chemical properties

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

<b>Form:</b>	Fluid
<b>Colour:</b>	transparent colourless
<b>Odour:</b>	Pungent
<b>Odour threshold:</b>	Not determined.
- **pH-value at 20 °C:** ~1\*
- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	>100 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.

(Contd. on page 6)

GB



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 5)

· <b>Ignition temperature:</b>	
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not applicable.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	~1.14* g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not applicable.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	* The values are for freshly produced material and may change with the time.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
To avoid thermal decomposition do not overheat.  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Violent reactions with strong alkalis and oxidizing agents.  
Reacts with light alloys to form hydrogen.  
Corrosive action on metals.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
Bases  
metals
- **10.6 Hazardous decomposition products:**  
In case of fire, the following can be released:  
Hydrogen fluoride  
silicon tetrafluoride  
No hazardous decomposition products if stored and handled as prescribed.

GB

(Contd. on page 7)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

Trade name: KEIM Concrete Cleaner

(Contd. of page 6)

### SECTION 11: Toxicological information

- 11.1 Information on toxicological effects

- Acute toxicity:

- LD/LC50 values relevant for classification:

<b>16961-83-4 fluorosilicic acid</b>		
Oral	LD50	430 mg/kg (rat)
<b>64-17-5 ethanol</b>		
Oral	LD50	7060 mg/kg (rat)
Inhalative	LC50/4 h	20000 mg/l (rat)
<b>69011-36-5 Isotridecanol, ethoxylated (2.5 - 7 EO)</b>		
Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
<b>7664-39-3 hydrogen fluoride</b>		
Oral	LD50	1276 mg/kg (rat)
Inhalative	LC 50/1h	0.82 mg/l (rat)

- Primary irritant effect:

- on the skin: Caustic effect on skin and mucous membranes.

- on the eye: caustic effect

- during inhalation: Irritating to respiratory system.

- during swallowing:

Swallowing will lead to a caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Sensitization: No sensitizing effects known.

- Other information (about experimental toxicology):

Experimental analysis are not available.

- Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

### SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

<b>16961-83-4 fluorosilicic acid</b>	
EC 50/24h	100 mg/l (bacteria)
EC 50/96h	10 mg/l (algae)
LC 50/96 h	65 mg/l (fish)
<b>64-17-5 ethanol</b>	
EC 50/48h	> 1000 mg/l (bacteria)
	> 5000 mg/l (daphnia)
EC 50/72 h	> 100 mg/l (algae)
LC 50/96 h	> 2000 mg/l (fish)

(Contd. on page 8)

GB



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 7)

**69011-36-5 Isotridecanol, ethoxylated (≈2.5 - £7 EO)**

EC 50	140 mg/l (activated sludge)
EC 50/48h	>1 - 10 mg/l (daphnia) (OECD/ 202)
EC 50/72 h	>1 - 10 mg/l (algae) (OECD/ 201)
LC 50/96 h	1-10 mg/l (freshwater fish) (OECD/ 203)
NOEC	220 mg/kg (Soil macro-organisms) 10 mg/kg (plants) (OECD/ 208) (21d) 0.37 mg/l (daphnia)

**7664-39-3 hydrogen fluoride**

EC 50/48h	97 mg/l (daphnia)
EC 50/96h	43 mg/l (algae)
LC 50/48h	299 mg/l (fish)
LC 50/96 h	51 mg/l (fish)
NOEC	231 mg/l (bacteria) (16h)

- **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:**  
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:**  
At present there are no ecotoxicological assessments.  
Must not reach sewage water or drainage ditch undiluted or unneutralized.  
Water hazard class 2 (German Regulation) (Self-assessment): 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.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**European waste catalogue**

06 01 06*	other acids
-----------	-------------

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

(Contd. on page 9)

GB





## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

Trade name: KEIM Concrete Cleaner

(Contd. of page 8)

- Recommended cleansing agents: Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

· 14.1 UN-Number	UN1778
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	1778 FLUOROSILICIC ACID
· ADR	FLUOROSILICIC ACID
· IMDG, IATA	
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	II
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Acids
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	metal corrosive
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	E
· UN "Model Regulation":	UN1778, FLUOROSILICIC ACID, 8, II

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Product-Code/Giscode: GF50

(Contd. on page 10)

GB



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

Printing date 03.04.2014

Version number 2

Revision: 03.04.2014

**Trade name: KEIM Concrete Cleaner**

(Contd. of page 9)

· **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**

- H225 Highly flammable liquid and vapour.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life with long lasting effects.
- R11 Highly flammable.
- R34 Causes burns.
- R41 Risk of serious damage to eyes.

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

· **Contact:** Mrs. Popescu

· **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 Harmonized 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- 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)

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

GB