



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

Printing date 18.10.2018



Version number 13.0

Revision: 18.10.2018

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

- **1.1 Product identifier**
- **Trade name: KEIM CONCRETAL-MKH**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture**  
Anticorrosion additive  
Layer to promote adhesion
- **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**  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Dam. 1 H318 Causes serious eye damage.  
STOT SE 3 H335 May cause respiratory irritation.
- **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 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Cement, portland, chemicals
- **Hazard statements**  
H315 Causes skin irritation.  
H318 Causes serious eye damage.

(Contd. on page 2)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 1)

H335 May cause respiratory irritation.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust.

P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P315 Get immediate medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P362 Take off contaminated clothing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

**2.3 Other hazards**

This Product contains cement. Cement produces an alkaline reaction with moisture or water. Avoid contact with eyes and prolonged skin contact.

**Results of PBT and vPvB assessment**

PBT: Not applicable

vPvB: Not applicable

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Description: Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 65997-15-1 EINECS: 266-043-4	Cement, portland, chemicals ☠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	25-50%
CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35	barium sulphate, natural substance with a Community workplace exposure limit	2.5-10%
CAS: 532-32-1 EINECS: 208-534-8	Natriumbenzoat ⚠ Eye Irrit. 2, H319	≥0.1-<1.5%

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:**

With appearance of symptoms or in cases of doubt seek medical advice .

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:**

Wash off immediately with water and soap and rinse well afterwards.

If skin irritation continues, consult a doctor.

(Contd. on page 3)



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

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 2)

- **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**  
No further relevant information available.
- **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**  
Avoid contact with skin and eyes.  
Avoid formation of dust.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Respect the protection rules (see section 7 a. 8).  
Product forms slippery surface when combined with water.
- **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:**  
Close drainages (Risk of blocking)  
Danger of slipping!  
Avoid formation of dust.  
Ensure adequate ventilation.  
Pick up mechanically.  
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.

(Contd. on page 4)



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

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

See Section 13 for disposal information.

(Contd. of page 3)

#### SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

- Avoid contact with skin and eyes.
- Keep receptacles tightly sealed.
- Prevent formation of dust.
- Any unavoidable deposit of dust must be regularly removed.
- Ensure good ventilation/exhaustion at the workplace.
- 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:** Do not store together with acids.

**Further information about storage conditions:**

- Store in dry conditions.
- Protect from humidity and water.
- Avoid dust formations and deposits.
- Keep container tightly sealed.
- Protect from heat and direct sunlight.

**Storage class:** 13

**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:**

**65997-15-1 Cement, portland, chemicals**

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
-----	---

**7727-43-7 barium sulphate, natural**

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
-----	---

**DNELs**

**7727-43-7 barium sulphate, natural**

Oral	Long-term - systemic effects	13,000 mg/kg bw/day (consumer)
------	------------------------------	--------------------------------

(Contd. on page 5)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 4)

Inhalative	Long-term - systemic effects	10 mg/m <sup>3</sup> (worker)
	Long-term - systemic effects	10 mg/m <sup>3</sup> (consumer)
	Long-term - local effects	10 mg/m <sup>3</sup> (worker)

**· PNECs****7727-43-7 barium sulphate, natural**

Aquatic compartment - freshwater	0.115 mg/l (freshwater)
Aquatic compartment - sediment in freshwater	600.4 mg/kg sed dw (sediment fresh water)
Terrestrial compartment - soil	207.7 mg/kg dw (soil)
Sewage treatment plant	62.2 mg/l (sewage treatment plant) (Ba)

· **Additional information:** The lists valid during the making were used as basis.

**· 8.2 Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

**· Respiratory protection:**

In a dusty environment wear suitable facemask.

Filter: FFP2

**· Protection of hands:**

Protective gloves

Alkaline resistant gloves

**· Material of gloves**

suitable material e.g.:

Butyl rubber, BR

Nitrile rubber, NBR

Nitrile impregnated cotton-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.

**· 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:**

In a dusty environment wear protective goggles.

Tightly sealed goggles

**· Body protection:**

Protective work clothing

(Contd. on page 6)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 5)

After contact with skin wash thoroughly with water and apply lotion.

· **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:** Powder**Colour:** Grey· **Odour:** Odourless· **Odour threshold:** Not determined· **pH-value:** 11.5-13.5\*  
With water mixed

##### · Change in condition

**Melting point/freezing point:** Not determined**Initial boiling point and boiling range:** Not determined· **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· **Oxidising properties** Not applicable· **Vapour pressure:** Not applicable· **Density:** Not determined· **Vapour density** Not applicable· **Evaporation rate** Not applicable

##### · Solubility in / Miscibility with water:

Insoluble

Miscible

· **Partition coefficient: n-octanol/water:** Not applicable

##### · Viscosity:

**Dynamic:** Not applicable**Kinematic:** Not applicable

(Contd. on page 7)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 6)

- **Solvent content:**
  - VOC (EC)** 0.00 %
- **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** Reacts with water alkaline and hardens.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **Thermal decomposition / conditions to be avoided:**  
Stable at environment temperature.  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Humidity
- **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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

**7727-43-7 barium sulphate, natural**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
	NOAEL	>104 mg/kg (rat)

**532-32-1 Natriumbenzoat**

Oral	LD50	3,140 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **during inhalation:** Irritating to respiratory system.
- **during swallowing:** Irritant effect possible
- **Respiratory or skin sensitisation**  
Product is reduced in chromate. Within the indicated storage time sensitization is not expected.
- **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

(Contd. on page 8)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 7)

- **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**  
May cause respiratory irritation.
- **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:

##### **7727-43-7 barium sulphate, natural**

NOEC	72 mg/l (algae) 3 mg/l (activated sludge) 33 mg/l (fish) 21 mg/l (daphnia)
EC 50/48h	14.5 mg/l (daphnia)
ErC50/72h	>1.15 mg/l (algae)
LC 50/96 h	>3.5 mg/l (fish)

##### **532-32-1 Natriumbenzoat**

EC 50/48h	>100 mg/l (daphnia)
ErC50/72h	>100 mg/l (algae)
LC 50/96 h	484 mg/l (fish)

- **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.
- **Ecotoxicological effects:**
- **Other information:** Elimination from the water by means of sedimentation.
- **Additional ecological information:**
- **AOX-indication:**  
According to our standard of knowledge the product does not contain any organic bounded halogen. The product has no influence on the waste water's AOX-value.
- **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.  
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

(Contd. on page 9)





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

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 8)

· **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**

17 01 01	concrete
----------	----------

· **Uncleaned packaging:**

· **Recommendation:**

Disposal must be made according to official regulations.  
Non contaminated packagings may be recycled.

· **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

GB

(Contd. on page 10)



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

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 9)

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
For information on labelling please refer to section 2 of this document.
- **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**
- **Please note:**  
TRGS 200 (Germany)  
TRGS 500 (Germany)  
TRGS 510 (Germany)  
TRGS 900 (Germany)
- **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.

- **Relevant phrases**  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.
- **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  
EC10: Effective concentration at 10% mortality rate.  
EC50: Half maximal effective concentration.

(Contd. on page 11)



Page 11/11

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

Printing date 18.10.2018

Version number 13.0

Revision: 18.10.2018

**Trade name: KEIM CONCRETAL-MKH**

(Contd. of page 10)

LC10: Lethal concentration at 10% mortality rate.

NOEC: No observed effect concentration.

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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.**

GB