



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

Printing date 20.10.2022



Version number 1.0

Revision: 20.10.2022

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

- **1.1 Product identifier**
- **Trade name: KEIM CONCRETAL-MR 2.0**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture**
Repair mortar
Concrete surfacer
- **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**
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
Burnt Oil Shale
Flue dust, portland cement

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Hazard statements

- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.

Precautionary statements

- P280 Wear protective gloves/protective clothing/eye 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: 93685-99-5 EINECS: 297-648-1 Reg.nr.: 01-2119703178-42-0000	Burnt Oil Shale ⚠ STOT RE 2, H373; ⚠ Eye Dam. 1, H318; ⚠ STOT SE 3, H335	≥3-<5%
CAS: 69012-64-2 EINECS: 273-761-1	amorphous silica substance with a Community workplace exposure limit	<2.5%
CAS: 68475-76-3 EINECS: 270-659-9	Flue dust, portland cement ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	≥1-<1.5%

Additional information:

The cement used is low in chromate, as its content of soluble chromium (VI) is below 2 ppm (0.0002%).

For the wording of the listed hazard phrases refer to section 16.

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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:**

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

No further relevant information available.

· 5.3 Advice for firefighters

· **Special 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 and 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.

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- **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.
 - 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 dust.
 - Ensure good ventilation/exhaustion at the workplace.
 - Any unavoidable deposit of dust must be regularly removed.
 - 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 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
- **GISCode** ZP1 Zementhaltige Produkte, chromatarm
- **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:

14808-60-7 Quartz (SiO₂)

MAK (Germany) | alveolengängige Fraktion

65997-15-1 Cement, portland, chemicals

AGW (Germany) | Long-term value: 5 E mg/m³
DFG

69012-64-2 amorphous silica

AGW (Germany) | Long-term value: 0.3 A mg/m³
DFG, Y, 1

· DNELs

65997-15-1 Cement, portland, chemicals

Inhalative | Long-term - systemic effects | 1 mg/m³ (worker)

93685-99-5 Burnt Oil Shale

Inhalative | Long-term - systemic effects | 0.233 mg/m³ (worker)

· PNECs

93685-99-5 Burnt Oil Shale

Aquatic compartment - freshwater | 0.02 mg/l (Freshwater)

Aquatic compartment - marine water | 0.002 mg/l (Seawater)

Sewage treatment plant | 100 mg/l (activated sludge)

· **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:

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

· Hand protection

Protective gloves

Alkaline resistant gloves

· Material of gloves

suitable material e.g.:

Nitrile impregnated cotton-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

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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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

In a dusty environment wear protective goggles.

Tightly sealed goggles

· Body protection:

Protective work clothing

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

· Environmental exposure controls

See Section 12 and 6.2

No further relevant information available.

SECTION 9: Physical and chemical properties

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

Solid

· Colour:

Grey

· Odour:

Odourless

· Odour threshold:

Not determined

· Melting point/freezing point:

Not determined

· Boiling point or initial boiling point and boiling range

2,230 °C

· Flammability

Not determined.

· Lower and upper explosion limit**· Lower:**

Not applicable

· Upper:

Not applicable

· Flash point:

Not applicable

· Ignition temperature:

Not determined

· Decomposition temperature:

Not determined

· pH at 20 °C

~11*

mixed with water

· Viscosity:**· Kinematic viscosity**

Not applicable

· Dynamic:

Not applicable

· Solubility**· water:**

Insoluble

Miscible

· Partition coefficient n-octanol/water (log value)

Not applicable

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· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density at 20 °C:	2.6-2.8* g/cm ³
· Relative density	Not determined
· Vapour density	Not applicable.
· Particle characteristics	See item 3.
· 9.2 Other information	* The values are for freshly produced material and may change with the time.
· Appearance:	
· Form:	Powder
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· 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
· 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** Reacts with water alkaline and hardens.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.

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- **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 hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

65997-15-1 Cement, portland, chemicals

Dermal LD50 >2,000 mg/kg (rabbit)

Inhalative LC50/4 h >5 mg/l (rat)

93685-99-5 Burnt Oil Shale

Oral LD50 >2,000 mg/kg (rat)

Inhalative LOAEL 0.000699 mg/l (worker)
Long-term value

- **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.
- **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.
- **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 (carcinogenicity, 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:****93685-99-5 Burnt Oil Shale**

NOEC	>100 mg/l (fish)
EC 50/48h	>100 mg/l (daphnia)
EC 50/72 h	82.7 mg/l (algae)
LC 50/96 h	>100 mg/l (fish)

69012-64-2 amorphous silica

NOEC	319 mg/l (daphnia)
EC 50/24h	>1,002 mg/l (daphnia)

· 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:**

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:

The statements on ecotoxicology have been derived from the properties of the individual components.

Do not allow product to reach ground water, water course or sewage system.

At present there are no ecotoxicological assessments.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Disposal must be made according to official regulations.

Must not be disposed with household garbage. Do not allow product to reach sewage system.

Unused remainders of the product should be regarded as hazardous waste.

Recommendation for non-reusable residues: Mix with water and allow to harden.

Allow wet product and product sludge to harden and do not allow to get into drains or waterways.

Dispose hardened product as concrete waste.

· **European waste catalogue**

17 01 01	concrete
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· **Uncleaned packaging:**

· **Recommendation:**

Non contaminated packagings may be recycled.

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 or ID 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 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

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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.

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)
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None of the ingredients is listed.

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

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

- **Product-Code/Giscode:** ZP1

- **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.

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H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

· **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)

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)

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)

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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