

# Material Safety Data Sheet

According to 91/155 EEC



Printing date 22.11.2006

Reviewed on 23.10.2006

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** KEIM Purkristalat-Farbpulver
- **Application of the substance / the preparation** Paint-powder for two componet silicate paint
- **Manufacturer/Supplier:**  
KEIMFARBEN GmbH & Co. KG  
Keimstrasse 16  
D-86420 DIEDORF  
Telefon: +49(0)821/4802-0  
Telefax: +49(0)821/4802-210
- **Further information obtainable from:** Product safety department

## 2 Composition/information on ingredients

- **Chemical characterization**
- **Description:**  
Paint powder based on silicatic and calcitic fillers as well as titanium dioxide and anorganic paint pigments

- **Dangerous components:**

CAS: 7727-43-7 EINECS: 231-784-4	barium sulphate, natural		10-25%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide		2.5-10%
CAS: 1314-13-2 EINECS: 215-222-5	zinc oxide	N; R 50/53	≤ 2.5%

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

## 3 Hazards identification

- **Hazard description:** not applicable
- **Information concerning particular hazards for human and environment:**  
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 4 First aid measures

- **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.
- **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.  
If symptoms persist consult doctor.

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### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, foam, dry extinguishing powder  
Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
During heating or in case of fire poisonous gases are produced.  
In case of fire, the following can be released:  
carbon oxide (CO<sub>x</sub>)  
Hydrogen fluoride (HF)  
Sulphur dioxide (SO<sub>2</sub>)  
Bariumoxide vapour
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
In case of fire do not breath smoke, fumes and vapours.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### 6 Accidental release measures

- **Person-related safety precautions:**  
Ensure adequate ventilation  
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.  
Do not inhale dust.
- **Measures for environmental protection:**  
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.
- **Measures for cleaning/collecting:**  
Close drainages (Risk of blocking)  
Pick up mechanically.  
Do not flush with water or aqueous cleansing agents  
Danger of slipping!  
Avoid formation of dust.  
Dispose of the material collected according to regulations.  
Clear contaminated areas thoroughly.
- **Additional information:** See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
See item 8 for information about suitable protective equipment and technical precautions. Respect the protection rules.  
Prevent formation of dust.  
Keep receptacles tightly sealed.  
Do not inhale dust.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.

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Suitable material for receptacles:

- Paper
- Polyethylene

- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
  - Store receptacle in a well ventilated area.
  - Store in cool, dry conditions in well sealed receptacles.
  - Avoid dust formations and deposits.
- **Storage class:** 13

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

**7727-43-7 barium sulphate, natural (10 - 25%)**

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
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**13463-67-7 titanium dioxide (2.5 - 10%)**

WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable **respirable
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- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Immediately remove all soiled and contaminated clothing
  - Do not inhale dust / smoke / mist.
  - Avoid contact with the eyes and skin.
  - Wash hands before breaks and at the end of work.
- **Respiratory protection:**
  - Use suitable respiratory protective device in case of insufficient ventilation.
  - Filter: P
- **Protection of hands:** Protective gloves
- **Material of gloves**
  - suitable material e.g.:
  - Nitrile impregnated cotton-gloves
  - 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.
- **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.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

### 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Solid
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<b>Colour:</b>	Different according to colouring
<b>Odour:</b>	Odourless
<b>· Change in condition</b>	
<b>Melting point/Melting range:</b>	> 1300°C
<b>Boiling point/Boiling range:</b>	Not applicable
<b>· Flash point:</b>	Not applicable.
<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>Oxidizing properties</b>	non-applicable
<b>· Vapour pressure:</b>	Not applicable
<b>· Density:</b>	0.6 - 0.8 * g/cm <sup>3</sup>
<b>· Vapour density</b>	non-applicable
<b>· Evaporation rate</b>	non-applicable
<b>· Solubility in / Miscibility with water:</b>	Insoluble.
<b>· pH-value:</b>	Not determined
<b>· Segregation coefficient (n-octanol/water):</b>	non-applicable
<b>· Viscosity:</b>	
<b>Dynamic:</b>	Not determined
<b>· Additional information:</b>	* The values are for freshly produced material and may change with the time.

### 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- Materials to be avoided:** Acids
- Dangerous decomposition products:**  
No hazardous decomposition products if stored and handled as prescribed.  
In case of fire, the following can be released:  
carbon oxide (COx)  
Hydrogen fluoride  
Sulphur oxides (SOx)  
Bariumoxide vapour

### 11 Toxicological information

- Acute toxicity:**

- LD/LC50 values relevant for classification:**

**1314-13-2 zinc oxide**

Oral	LD50	> 5000 mg/kg (rat)
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**14542-23-5 Fluorit (CaF<sub>2</sub>)**

Oral	LD50	4250 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Frequent persistent contact with the skin may cause skin irritation.
- **on the eye:** Product powder can cause temporary mechanical eye irritation.
- **during inhalation:**  
By excess of "common dust exposure limit" is - comparable to inert dust - a mechanical overload of respiratory tracts possible.
- **Sensitization:** No sensitizing effects known.
- **Other information (about experimental toxicology):** Experimental analysis are not available.
- **Additional toxicological information:**  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:**  
Harmful to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.
- **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. 76/464 EC:**  
The product contains TiO<sub>2</sub>, ZnS, BaSO<sub>4</sub>, ZnO.
- **General notes:**  
The product may not be released into the environment without control.  
The product does only consist of anorganic substances; the definition of ecological data like biological degradability, COD and BOD is not expedient.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

### 13 Disposal considerations

- **Product:**
  - **Recommendation** Disposal must be made according to official regulations.
- |                                 |  |
|---------------------------------|--|
| <b>European waste catalogue</b> |  |
| 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.

### 14 Transport information

- **Transport/Additional information:** No dangerous good in sense of these transport regulations.

### 15 Regulatory information

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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- **Risk phrases:**  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

## 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 R-phrases**  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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