# **Technical Data Sheet**



## **Kieselit-Bio-Mineral LKF**

Ready for use interior silicate dispersion paint in compliance with DIN 18363, for mineral substrates. Corresponds to opacity class 1 and wet scrub resistance class 2. Free of preservatives and suitable for allergic persons. Protection against algae and fungal infestation due to the natural alkalinity of the product.



### **Product characteristics**

Properties • Highly diffusible

For a comfortable room climateIdeal for embedding fleeces

Resistant to disinfectants as per test certificate

Solvent- and plasticizer-freeFree of preservatives

Free of fogging-active substances

Tox-free as confirmed by German TÜV-certificate Suitable for allergic persons as per test certificate

Areas of application Interior only

Suitable substrates in detail • New mineral plasters

Surfaces prone to mildew and fungal infestation

For sensitive and highly stressed walls and ceilings in private and commercial areas

New woodchip wallpapers and glass fabrics

Highly sensible living quarters (e.g. schools, nurseries, etc.)

Stressed wall surfaces

• Ideal as paint reinforcement in combination with ALLFAtexx-Anstrichvlies (GV 35)

### **Material description**

Binder Potassium water glass

Ingredients Titanium dioxide

Fillers
Additives

Density 1.5 kg/l
Water vapour permeability < 0,01
Maximum particle size Fine
Wet scrub class 2

Opacity class 1 at 6 - 7 m<sup>2</sup>/L

Average consumption (short approx. 150 - 180 ml/m<sup>2</sup>

text)

Average consumption

The consumption varies depending on the application technique and the substrate. It is therefore advisable to de-

termine the exact consumption figure by producing a sample area.

Colour shade White

Base 3

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Suitable tinting paints Kieselit full colour and tinting paints or ready-mixed at the factory. Base 1 - 3 products with system-matching tinting

pastes of the ALLFAcolor range. Please note that with tinted products the specified properties may change.

Gloss level Dead matt according to EN 13300

Storage Cool, but protected from frost

**Thinning** Kieselit-Grundiermittel mixed with water at a ratio of 1:1.

### **Substrates**

#### Suitable substrates

- All usual mineral substrates (renders/plasters, concrete, masonry)
- · Gypsum wallboards and gypsum plasterboards
- Gypsum plaster
- Solid mineral and organic existing paint layers
- · Woodchip wallpaper
- Glass fabrics

#### Substrate conditions

The substrate must be clean, dry, firm and sound. Follow the building regulations (in Germany VOB, Part C, DIN 18363, Section 3). Inside renovation coatings can normally be carried out without a special priming coat. For new coatings the surface has to be first attended with an appropriate primer of the ALLIGATOR – product range, following the technical specifications.

#### Substrate conditions

### **Gypsum blocks**

Adjust the primer to absorbency. With coatings destined to bridge capillary cracks, reinforce completely using a fleece. In addition the guidelines of BFS-Fact Sheet No. 17 apply.

#### Gypsum building boards (interior)

Adjust the primer to absorbency. With coatings destined to bridge capillary cracks, reinforce the entire surface using a fleece. In addition the guidelines of BSF Fact Sheet No. 12 apply. Ingredients which might penetrate have to be isolated before following coatings.

### Gypsum plaster, gypsum sand plasters etc.

Remove any sintered layers. For first coatings take care of a sufficient penetration of the primer (e. g. by using a penetrating primer). Additionally the guidelines of BFS Fact Sheet No. 10 apply.

### Derived timber products (chipboards, OSB-boards etc.) - interior

Have to be covered with a suitable gypsum board or gypsum fibre board as otherwise cracks may occur in the area of butt-joints.

### Aerated concrete - interor:

In case of rooms of high humidity, external walls have to be additionally treated by a moisture guard, applied onto their insides. This can be effected applying a two-component coating like e.g. Hydropox. In addition the guidelines of BFS Fact Sheet No. 11 apply.

### Base renders (interior):

Mineral base renders must be thoroughly cured and dry, because otherwise discolouration, in particular with tinted following coats, may occur. As a rule of thumb assume 1 day drying time per mm of layer thickness, but correspondingly longer at low temperatures and high humidity. Excessive temperatures and low relative humidity also lengthen the setting process. Treat replastered locations with fluosilicate. In addition, the guidelines according to BFS Fact Sheet No. 10 apply.

### Concrete

Remove forming oil, grease and wax by washing with surfactant. Remove any sintered layers mechanically. Check the absorbency of the concrete by wetting tests. In addition, the guidelines according to BFS Fact Sheet No.1 apply for exterior coatings and the guidelines according to BFS Fact Sheet No. 8 for interior coatings.

### **Application**

### Application method

Application by brush, roller or spraying

### Coating system

Initial coatings

Priming coat with Kieselit-Grundierfarbe or Kieselit-Grundiermittel thinned with water 1:1.

**Intermediate coating** thinned to max. 3%. **Finishing coating** preferably unthinned.

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### Recoatings

Priming coat with Kieselit-Grundierfarbe or Kieselit-Grundiermittel thinned with water 1:1.

With solid and sound substrates a priming coat can be omitted. Apply Multi-Grund 3 in 1 LEF or Grundweiß LEF as priming coat for organic substrates.

Intermediate coating thinned to max. 3%.

Finishing coating preferably unthinned.

Due to the great varieties of our range and specific applications it is also possible to use other primers or coating systems. For this please contact our technical service.

Application

When painting pay attention to spread the material liberally and evenly in order to achieve a coat thickness which is necessary for the visual appearance and durability.

**Application hints** 

In case of increased load two paint layers might be necessary.

Note

Check tinted paint for colour accuracy prior to the application. Objections regarding the colour shade cannot be accepted after the application.

The figures given for parameters are average values. Due to the use of natural raw materials in our products, the actual value determined on the individual supplied product may differ slightly without affecting its suitability. These date refer to the white respectively standard product. Tinting may cause deviations.

Plasto-elastic joints should not be coated as the higher elasticity of the sealing mass might cause cracks or discolouration of the coating. In individual cases tests have to be carried out to judge the suitability.

With coatings on woodchip wall paper, natural wood constituents in combination with silicate paints, may cause yellowish brown discolouration. These areas may be isolated selectively with Iso-Grund.

On smooth surfaces and under adverse light conditions, an irregular suface is normal and cannot always be avoided.

With varying absorptivity and substrate moisture as well as with alkalinity, the chemical binding process - particularly with tinted products - may provoque irregular drying.

Adjacent areas, particularly glass, ceramics, clinker, need to be masked carefully, as the product may affect the surface.

### **Practical hints**

### Repairs

Touching up surfaces may be more or less visible, even with using the original coating material. Traces are unavoidable according to BFS Fact Sheet No. 25. Whether a repair is considered as optically disturbing is depending on many parameters, like colour shade, gloss level, layer thickness, substrate, illumination etc. It is advisable to apply a test coating on inconspicuous places.

### Colour Accuracy / Metamerism

The perception of colour shades is influenced by various parameters, such as light, gloss, angle, structure. Substrates of different degrees of irregularities may have different effects despite having been coated with the same material. Coating materials of the same hue but of different gloss levels also appear to be different. Various materials of the same colour shade that appear to be matching by daylight may show strong deviations in artificial light (metamerism effect). In case of increased requirements on matching colours of different building parts, materials and / or surfaces, the BFS Fact Sheet No. 25, section 4.2.2. can be taken into consideration.

### Fogging

The phenomenon of suddenly occuring black dust deposits on interior surfaces (fogging effect) has not yet been fully elucidated. As a preventive, the Federal Environment Agency (Umweltbundesamt) recommends to only use low-emission, in particular plasticizer-free products. These products are solvent- and plasticizer-free. The absence of fogging cannot be ensured.

### **New mineral Substrates**

New mineral substrates may only be coated after setting and drying, not earlier than after 14 days, better after 4 weeks. In unfavourable drying conditions, the waiting period can be prolonged.

### Non-combustibility

According to DIN 4102 (in Germany) the construction material class A (non-combustibility) is retained with usual mineral substrates such like renders/plasters, concrete and also gypsum plasterboard with enclosed surface, even if their surfaces are coated with dispersion based paints. For usability certificate as non-combustible system for interiors with ALLFAtexx glass fibres and fleeces refer to the general construction supervision test report.

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### Hairline Crack bridging Coatings on Gypsum Plasterboard

In correspondance with the building regulations (in Germany VOB/C DIN 18363, Section 3.2.1.2) hairline crack bridging coatings on gypsum plasterboards and gypsum fibreboards can only be realized by the additional embedding of a fleece.

### Sidelight

Unfavourable lighting conditions (sidelight) may occur for instance after the subsequent installation of lights. This fact must be known before works. Specific requirements on evenness and uniformity of the coating have to be previously agreed upon.

Temperature limit Between+ 8° C and + 30° C for substrate and ambient air during processing and drying.

**Drying time** At + 20 ° C for substrate and ambient air and 65% relative humidity (RH), recoatable after approx. 4 - 5 hours. Lower

temperature or a higher humidity extend the drying time.

**Tool cleaning** Immediately after use with water and soap

### Information

Product code BSW40 (M-SK01)

General information Keep out of reach from children. Ensure good ventilation during use and drying. Do not eat, drink or smoke while

using the product. In case of contact with eyes or skin, immediately and thoroughly rinse with water. Do not allow to enter drains, waterways or soil. Clean tools immediately with water and soap. The coating material is highly alkaline.

Therefore protect skin and eyes from paint splashes.

Declaration of ingredients Polyacrylte dispersion, potassium water glass, titanium dioxide, calcium carbonate, siliceous fillers, water, additives

Observe safety data sheets Further details: See Safety Material Data Sheet (MSDS)

Category VOC EU limit value for the VOC contents of this product:

(Category A/a) 30 g/l (2010). This product contains max.

VOC content (in gram per

litre)

< 1 g/l

WHC 1 (weakly water-polluting)

Waste disposal Only completely emptied containers should be given for recycling. Dispose containers with residues of liquid product

via waste collection point accepting old paints and enamels. Dispose dried hardened product residues as construc-

tion site/demolition/ municipal or domestic waste.

### **Container size**

Content		EAN code	Article no.
2,5 L	Weiß	4002822028817	918264
1,25 L	Weiß	4002822028800	918263
25 L	Weiß	4002822027872	907671
15 L	Weiß	4002822023263	879133
12,5 L	Weiß	4002822023270	879134
5 L	Weiß	4002822013271	755700
11,25 L	Basis 3	4002822022556	878644
4,5 L	Basis 3	4002822022563	878646
2,25 L	Basis 3	4002822023867	884621
1,125 L	Basis 3	4002822022549	878643

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### System specific and system completing products

Grundweiß LEF

Kieselit-Grundiermittel

Multi-Grund 3 in 1

This data sheet cannot deal with all types of application arising in practice. Therefore, we cannot be held responsible for their content. These instructions do not release the purchaser / applicator from his responsibility of professionally examining the substrate and determining the suitability of the product in consideration of the project characteristics. In case of queries please request the technical assistance of ALLIGATOR FARBWERKE.

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