





# Kalisil ELF 1809

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low-emission, solvent and plasticizer free, dull matt silicate paint, wet abrasion resistance class 2, AgBB-tested, white, for interior use

# **Properties**

Low-emission, solvent and plasticizer free, high quality silicate dispersion paint according to VOB, DIN 18363. Without preservatives and free from fogging-active substances. The standard white color shade is suitable for allergy sufferers. Highly diffusible; complies with Class I according to DIN EN ISO 7783. Tested according to requirements of AgBB evaluation schemes, low odor and easy to use. Bonds to the substrate by silification.

# **Field of Application**

For high quality interior ceiling and wall finishes, particularly on mineral substrates capable of silification, such as interior plaster (compressive strength category CS I – CS IV and B1 – B7, compressive strength >1.5 N/mm<sup>2</sup>), concrete, sand-lime brickwork.

# **Material description**

Standard color: white Light colors can be mixed using the Brillux Color System. Base material: potassium silicate with organic stabilizers Organic fraction: < 5% in compliance with VOB DIN 18363, 2.4.1.1

**Density:** approx. 1.5 g/cm<sup>3</sup> **ph:** approx. 11

Classification in accordance with EN 13300:

- Wet abrasion resistance: Class 2
- Contrast ratio:
- Class 2 at 7 m<sup>2</sup>/l
- Gloss: dull matt

Maximum grain size: fine
Water vapor diffusion rate:
V ≥ 2000 g/m<sup>2</sup>d

Water vapor permeability

(diffusion-equivalent air layer thickness):

 $s_d$  (H<sub>2</sub>O) = < 0.03 m corresponds to class I "highly water-vapor permeable" in accordance with DIN EN ISO 7783

Packaging: 15 |

# Use

Thinning

Dilute slightly with water, if required.

### Tinting

Tintable up to max. 25% using Color Concentrate ELF 9018. Note that colors are brighter when dry.

### Compatibility

Only mixable with similar materials and those specified in this Data Sheet.

### Application

Stir thoroughly with an electric agitator before applying. Kalisil ELF 1809 can be applied with brush, roller or by airless spraying.

### Consumption

Approx. 130–150 ml/m<sup>2</sup> per layer.

Determine exact consumption by way of a test application on the object to be coated.

### Application temperature

Do not apply if air or object temperature is below +8°C.

#### Tool cleaning

Clean tools immediately after use with water.



# Drying (+20 °C, 65 % relative humidity)

Surface dry and recoatable after approx. 4-6 hours. Final silification after several days. Allow longer drying times at lower temperatures and/or higher air humidity.

# Storage

Store in a cool and frost-free location. Reseal opened containers tightly.

# Declaration

Note

Do not inhale the paint spray.

# Water pollution classification

WGK 1, according to VwVwS.

Product code M-SK01.

Comply with the specifications in the current safety data sheet.

### Airless spray data

| Nozzle size |           | Spray angle  | Pressure in bars  | Dilution   |
|-------------|-----------|--------------|-------------------|------------|
| Inch        | mm        | Splay aligie | r ressure in pars | Dilation   |
| 0.021-0.027 | 0.53-0.69 | 40°-80°      | approx. 150       | approx. 5% |

# **Coating build-up**

#### Substrate preparation

solid, dry, clean, load-bearing and free from efflorescence, sinter layers, separating agents, corrosion-promoting components or other intermediate layers affecting the adhesion. Check existing coatings for their suitability, load-bearing capacity and adhesive properties. Remove defective and unsuitable coatings thoroughly and dispose of them in accordance with the applicable regulations. Thoroughly wash off limepaint. Treat replastered areas with a fluorine primer, if the subsequent paint coat is to be tinted, prime the entire surface. Apply a prime and/or intermediate coat to the substrate as required. Also see VOB Part C, DIN 18363, Section 3.

| Substrates  | Primer coat  | Intermediate coat 1)   | Top coat         |
|---|--|--|------------------|
| Normally absorbent sub-<br>strates such as interior plas-<br>ter (CS I – CS IV), intact,<br>matt emulsion paint coatings                                |  | Kalisil ELF 1809, dilut-<br>ed with water as re-<br>quired                                   | Kalisil ELF 1809 |
| Brillux Woodchip Wallpaper<br>31, 51 and 71   |  |  |                  |
| Highly absorbent substrates,<br>porous, sandy interior plas-<br>ter (CS I – CS IV), concrete,<br>sand-lime brickwork, intact<br>silicate paint coatings | 1–2x wet in moist Silicate<br>Primer ELF 1803 and wa-<br>ter, mixing ratio 1:1 |  |                  |
| glossy emulsion paint coat-<br>ings   | Adhesion<br>Primer ELF 3720  |  |                  |
| Gypsum plaster (B1 – B7),<br>gypsum plasterboard, gyp-<br>sum fiber boards  | Wall Primer ELF 3729 <sup>2)</sup>   | Depending on the re-<br>quirements, Kalisil ELF<br>1809, diluted with wa-<br>ter as required |                  |

<sup>1)</sup> If filling or textured characteristics are required, use Silicate-Brush-On Filler ELF 3639 for the intermediate coat.

<sup>2)</sup> Before application, reinforce soft gypsum plasters and filler masses with Lacryl Deep Penetrating Primer ELF 595 or Deep Penetrating Primer 545, as required



## Notes

#### **Cover surfaces**

Carefully cover the area around the painted surface, especially glass, brickwork and natural stone.

# Filling cracks and damaged areas

Fill any cracks and small holes after priming with a mixture of silicate paint and quartz sand level with the surface. Prime plastered places. Re-plaster large damaged areas.

#### **Smoothening rough surfaces**

If required, level rough surfaces before building up the coat, e.g. using Mineral Hand Applying Light Filler 1886.

#### Reaction with the substrate

When applying renovation coats on aqueous coatings, the moisture can activate existing allergenic substances in the substrate in rare cases. We therefore recommend performing a test application to test whether such reactions occur.

#### Coatings on gypsum plasters

In the case of highly absorbing gypsum plasters, hardening will not always be sufficient. For this reason, we recommend testing the adhesion by way of an adhesive tape test (tesaband 4651), i.e. produce sample of the complete coating system, apply tape and tear it off to verify adhesion. If necessary, use deep penetrating primer for prime coating.

# Discoloration on gypsum plasterboards

If there is a risk of discolorations penetrating through untreated gypsum plasterboard, an additional blocking coating must be applied. Depending on the situation at the specific site, use Aqualoma ELF 202, Isolating Primer 924 or CreaGlas 2C PU Finish 3471 for this. Sample coatings over the width of a number of boards including joints and filled points have been shown to be appropriate for precise evaluation.

# Gypsum fillers on gypsum plasterboard

The gypsum fillers recommended by gypsum plasterboard manufacturers can be particularly susceptible to moisture, which can result in swelling, bubble formation, and flaking (see also Data Sheet 2 "Filling of gypsum plasterboards, surface qualities" Trade Association of the German Gypsum Plasterboard and Wallboard Industry). It is therefore important to ensure adequate ventilation and appropriate temperatures for rapid drying.

# Compatibility with sealing compounds

When coating sealants, such as acrylic sealing compounds, cracks may arise in the coating material due to the higher elasticity. Additionally, discoloring of the coating may occur. Due to the great variety of coating systems which are available on the market, we recommend test applications to assess adhesion properties and application results.

#### Repairs

Repairs to the surface become more or less strongly apparent depending on the situation on site. This is unavoidable according to BFS Leaflet No. 25, Item 4.2.2.1, Section e).

# Surface irregularities after drying

Due to the chemical curing process, color and surface irregularities can occur as a result of unfavorable object conditions in combination with factors such as uneven substrate absorptivity, varying substrate moisture and alkalinity or components in the substrate. Such effects do not represent technical or functional defects, and no complaints are accepted in this context.

#### Use in cases of grazing light

On smooth surfaces exposed to special lighting conditions (grazing light), we recommend the use of special interior emulsion paints such as Glemalux ELF 1000 or Super Latex ELF 3000.

#### Reducing the surface sensitivity of intense color shades

To increase the durability of the surface and decrease the writing effect on matt coats of intense color shades, we recommend applying an exterior coat of Vetrolux ELF 3100. More information about properties and application can be found in the Data Sheet Vetrolux ELF 3100.

#### **Further information**

Follow the instructions on the data sheets of the products used.



# Remark

This Data Sheet has been prepared taking into account the current applicable German laws, standards, specifications and codes of practice. All details have been translated from the current German version. The contents do not form a legal contract. The user and/or the purchaser is not released from the responsibility of checking that our products are suitable for the proposed use. In addition our Terms of Conditions and Payment apply.

When a new version of this Data Sheet appears with updated information the previous version no longer applies. The current version is available on our website.

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