Data Sheet

Kalisil 1909

Sol silicate interior paint, low-emission, solvent- and plasticizer-free, dull matt, wet abrasion resistance R class 1, for interior use

Field of application

For high-quality ceiling and wall coats in interior use, in particular on silicificating mineral substrates, e.g. interior plaster, concrete, sand-lime brickwork.

Properties

- preservative-, solvent- and plasticizer-free, low-emission
- Complies with the requirements of the Committee for the Health-related Evaluation of Building Products (AgBB)
- Free of fogging-active substances
- Silicate dispersion paint in accordance with DIN 18363
- with Sol-Xtreme - sol-silicate bonding agent
- Highly diffusible, corresponds to Class I in accordance with DIN EN ISO 7783
- Low odor
- Resistant to mold
- Can be processed in airless spray application
- Bonds to the substrate by silification

Material description

Colors	0095 white Light color shades can be mixed with the Brillux Color System.
Base material	Potassium water glass, silica sol and organic stabilizers
Organic content	< 5%, in accordance with DIN 18363, 2.4.1.1
Density	approx. 1.5 g/cm³
pH value	approx. 11

Material description

Classification according to EN 13300
Wet abrasion resistance: R class 1
Contrast ratio: H_{10} class 2 (at 7 m²/l)
Gloss: G4 dull matt
Maximum grain size: S1 fine

Reaction to fire
A2 – s1,d0 in accordance with DIN EN 13501-1 (“nichtbrennbar”, non-combustible), for 0095 white and all light color shades in accordance with classification report no. 230011570-3.
In system build-up with Briplast filler material according to classification report no. 230010838-3.

Water vapor permeability
Diffusion-equivalent air layer thickness: S_d (H_2O) < 0.03 m in accordance with DIN EN ISO 7783, corresponds to Class V_1 “highly water-vapor-permeable” according to DIN EN 1062-1

Water vapor diffusion current density
P ≥ 2000 g/m²d

Packaging
15 l

Use

Dilution
Where necessary, with a mixture of Fondosil 1903 and water (mixing ratio 1:1).

Tinting
Light color shades can be mixed with the Brillux Color System.

Compatibility
Can only be mixed with similar materials and those stipulated in this data sheet.

Application
Before use, stir thoroughly with an electric stirrer. Kalisil 1909 can be applied by using a brush, roller and airless spray application.

Consumption
Approx. 130-150 ml/m² per layer. Determine the exact consumption by means of a test application on the object to be coated.

Application temperature
Do not apply at an air and object temperature below +8 °C/ 41 °F.

Cleaning tools
Clean tools immediately after use with water.

Spray data

Spray system	Nozzle	Spraying angle	Pressure	Dilution
High-performance airless system	0.021–0.027 Inch	40°–80°	depending on the spraying device and individual requirements	5-15 %

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

Surface-dry and can be processed 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 place. Reseal opened containers tightly.

Declaration

Product code BSW10
Comply with the specifications in the current Safety Data Sheet.

Coating build-up

Substrate preparation

- The substrate must be 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.
- Thoroughly remove defective and unsuitable coatings and dispose of them in accordance with the applicable regulations.
- Thoroughly rinse off reversible, water-sensitive coats (e.g. distemper).
- Treat replastered areas with a fluorine primer, over the entire area for colored coatings.
- Also see VOB Part C, DIN 18363, Section 3.

First and renovation coats

<table>
<tr><th>Substrates</th><th>Prime coat</th><th>Intermediate coat [3]</th><th>Top coat</th></tr>
<tr><td>Normally absorbent substrates, e.g. interior plaster (compressive strength category CS I - CS IV) [1]</td><td rowspan="3"></td><td rowspan="4">Kalisil 1909, thinned where necessary</td><td rowspan="6">Kalisil 1909</td></tr>
<tr><td>Brillux woodchip wallpaper 31, 51 and 71</td></tr>
<tr><td>Intact, matt emulsion paint coats</td></tr>
<tr><td>Highly absorbent substrates, e.g. interior plaster (compressive strength category CS I - CS IV) [1], concrete, sand-lime brickwork, intact silicate paint coats</td><td rowspan="2">1–2x wet in moist Fondosil 1903 and water in mixing ratio 1:1</td></tr>
<tr><td>KlimAir system build-up with KlimAir Panel 1866 [4]</td><td rowspan="2">Depending on the individual requirements, Kalisil 1909, thinned as required</td></tr>
<tr><td>Intact, gloss emulsion paint coats</td><td>Adhesion Primer 3720</td></tr>
<tr><td>Gypsum plaster (compressive strength category B1–B7), gypsum plasterboard, gypsum wallboard</td><td>Wall Primer 3729 or Wall Primer coarse 3728 [2]</td></tr>
</table>

[1] Minimum compressive strength > 1,5 N/mm²
[2] Prime soft and highly absorbent filler zones and substrates with Lacryl Deep Penetrating Primer 595 as part of the substrate preparation.
[3] If filling or texturing properties are required, use Silicate Brush-On Filler 3639 or Klimasil 1908 as an intermediate coat.
[4] Follow the instructions on the data sheets of the following products for information on the KlimAir system build-up: KlimAir Panel 1866 and KlimAir Adhesive Plaster 1868.

Notes

Mask surfaces	Mask the surroundings of the surfaces that are to be coated carefully, especially glass, brick and natural stone.
Cracks and flawed areas	Fill cracks and indentations flush with surface after priming with a fillable mixture of silicate paint and quartz sand. Re-prime filled areas. Re-plaster larger flawed areas in the substrate.
Smoothening rough surfaces	Smooth rough surfaces before the coating build-up by filling them with, e.g. Briplast Silafill 1886, as required.
Reaction with the substrate	For renovation coats on watery coatings, allergenic substances present in the substrate may be activated due to the moisture impact in rare cases. We therefore recommend applying a test coat to check whether such reactions occur.
Coating on gypsum plasters	For gypsum plasters with high absorbency, an adequate stabilization is not always achieved. We recommend checking the adhesion of the complete coating build-up with an adhesive tape test (e.g. Tesa Precision Masking Tape, gold 4334) to ensure a reliable assessment. Deep penetrating primer should be used where necessary.
Discolorations of gypsum plasterboard	An additional sealing coating should be applied if there is a risk of discolorations penetrating through the untreated gypsum plasterboard. Use e.g. Isolating Primer 924 for this depending on the situation on site. For an accurate assessment, sample coatings of various panel widths, including the joints and filled areas, have proven to be useful.
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 compound	When coating sealing compounds, e.g. acrylic sealing compounds, cracks may occur in the coating material due to the higher elasticity. Discolorations may also occur in the coating. Due to the wide range of sealing compounds available on the market, self-tests must be carried out to assess the adhesion and the processing result in each individual case.
Repairs	Surface repairs are more or less strongly apparent depending on the situation on site. This is unavoidable according to BFS Data Sheet No. 25, Point 4.2.2.1, Section e.
Surface irregularities after drying	Due to the chemical curing process, different discolorations and surface irregularities may occur in unfavorable object parameters, combined with e.g. uneven substrate absorbency, differences in substrate humidity and alkalinity or ingredients in the substrate. This does not constitute a technical-functional defect and does not justify complaint.

Notes

Use in incidence of grazing light

On smooth surfaces with special lighting conditions (grazing light), we recommend using special interior emulsion paints, such as Glemalux 1000, Superlux 3000 or Vitasense 9005 – preservative-free.

Reduced surface sensitivity for vibrant color shades

When applying matt coats in vibrant color shades, we recommend a coating build-up with Vetrolux 3100. This increases the surface durability while reducing the “writing effect”. Further information about the properties of Vetrolux 3100 and how it is applied is provided in the data sheet.

Further information

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

Remark

This Data Sheet is based on extensive development work and years of practical experience. The translation corresponds to the current German version, in compliance with the German laws, regulations, standards and guidelines. Its content does not constitute a contractual legal relationship. The user/buyer is not released from the responsibility of checking our products to ensure they are suitable for the intended application. In addition, our general terms of business apply.

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