# **Data Sheet**

# **Concrete Protection LF 861**



colorless, solvent-free coating for exposed concrete and aggregate concrete, for interior and exterior use, can also be mixed in glaze color shades



**Color System** 

# Field of application

For colorless, weather-resistant coatings on new and old intact exposed aggregate concrete surfaces outdoors. Can also be used as a glaze on exterior exposed aggregate, structural and exposed concrete surfaces. Can also be used on individual interior surfaces, colorless or as a glaze, on load-bearing mineral substrates, e.g. concrete, plaster (MG PII, PIII) and intact coats of emulsion paint.

# **Properties**

- Solvent-free
- Water-dilutable
- Pure acrylic emulsion base
- For indoors and outdoors
- Weather-resistant
- Low odor
- Alkali-resistant
- Non-saponifiable
- Water-vapor-permeable
- Wet abrasion resistance: R-class 1
- Can also be used as a glaze
- High protective function against carbon dioxide
- Tested as a carbonization-inhibiting coating for concrete surfaces in accordance with the test report
- Very easy to apply
- Optionally available for external areas in Protect quality (film protection against an algal and fungal infestation of the coating)
- For exposed aggregate concrete surfaces or as a glaze on structural and exposed concrete surfaces

# **Material description**

Color shades Colorless

Choose from 64 color shades via the Brillux Color System according to

the Creativ Glaze color chart

Gloss grade Silk matt

Base material Pure acrylate copolymer



**Material description** 

Density Approx. 1.05 g/cm<sup>3</sup>

Diffusion-equivalent air layer

thickness with 90 µm dry film thickness s<sub>d</sub> (H<sub>2</sub>O) approx. 0.46 m

s<sub>d</sub> (CO<sub>2</sub>) approx. 153 m

Diffusion resistance coefficient

 $\mu (H_2O) = 5,200$  $\mu (CO_2) = 1,700,000$ 

Packaging 101

Color System: 10 I

Use

**Thinning** Stir thoroughly before use and mix with approx. 10% water to obtain the

required application consistency. For coarse or very rough (washed)

concrete surfaces, add up to 20% water.

**Tinting** All glaze color shades can be mixed with one another without

limitations. The glaze effect of all color shades can be individually

adjusted by adding the colorless base material.

Compatibility Can only be mixed with materials of the same type and those specified

in this data sheet.

Application Apply Concrete Protection LF 861 colorless using a paint brush or roller

and in an even, not too thick layer. Applying too much material (e.g. in the recesses of structured surfaces) results in a cloudy or milky appearance. Apply the material individually in short crisscrossing strokes and distribute and smooth it uniformly to form an irregular, fine roll structure. Do not roll the surface in even, continuous strips; do not

reroll the surface afterwards.

When applying to an opaque intermediate coat, use the Universal Inking Rollcoater 1102 or the Block Brush, Oval 1175, for example, depending on the substrate. Then blend the wet material with the Block Brush, Oval 1175, the Surface Block Brush 1210 or the Decorative Wiper 1192,

depending on the desired surface appearance. Only apply as much material as can be textured within the open time.

We always recommend testing the material on the substrate in advance

to determine the effect and the surface finish.

**Consumption** Approx. 140 to 200 ml/m<sup>2</sup> thinned material per coat (corresponds to

approx. 120 to 170 ml/m² unthinned material) on smooth or finely textured surfaces. For coarse or very rough substrates, consumption may be higher. Determine the exact consumption by means of a test

application on the object to be coated.

**Application temperature** Do not apply if the air, substrate and material temperature is below +5°C

or higher than +30°C, even during the drying phase. Do not apply unless

the temperature is at least 3°C above the dew point. The relative

humidity must not exceed 80%.

**Tool cleaning** Clean tools with water immediately after use.



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

Recoatable after approx. 12 hours. 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**

Note Contains preservatives.

Product code BSW50

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. Remove fine-grained layers on concrete surfaces mechanically or by means of pressure washing. Check the suitability, load-bearing capacity and adhesive properties of existing coatings. Thoroughly remove defective and unsuitable coatings and dispose of them in accordance with the applicable regulations. Roughen and clean smooth and dense substrates using a suitable object-related process. Clean surfaces infested with fungi and algae thoroughly and then treat them with Universal Disinfectant 542\*. (\* Use biocide products with care. Always read the label and product information before use.). Treat replastered areas with a fluorine primer. Repair damaged concrete surfaces using the Brillux concrete protection system. Apply a prime and/or intermediate coat to the substrate as required. Substrate moisture penetration must be avoided. See also VOB Part C, DIN 18363, Section 3 as well as DIN 18349, Section 3.

#### Colorless coating with Concrete Protection LF 861 1)

Substrates	Prime coat	Intermediate coat	Top coat
untreated, intact, absorbent concrete, washed concrete , 2)	Concrete Protection LF 861, water-diluted	Concrete Protection LF 861, water-diluted, as required	Concrete Protection LF 861, water-diluted
suitable interior concrete surfaces			

<sup>&</sup>lt;sup>1)</sup> Concrete protection LF 861 is optionally available in "Protect quality" – with film protection against algal and fungal infestation.

Transparent coatings can intensify the color shade of the existing substrate.



<sup>&</sup>lt;sup>2)</sup> In the case of dense, non- or slightly absorbent concrete, e.g. pre-fabricated concrete parts, apply a test sample, if necessary.

# Coating build-up

# Glazing coating with Concrete Protection LF 861 1)

Substrates <sup>2)</sup>	Prime coat	Intermediate coat 1)	Top coat 1)
uncoated, intact, absorbent exposed aggregate, structural and exposed concrete surfaces	as required Concrete Protection LF 861, colorless, diluted with water (up to 20%) or Lacryl Deep Penetrating Primer ELF 595		
opaque coating, outdoors with Concrete Acryl OS 859 or Evocryl 200 <sup>3)</sup>		Concrete Protection LF 861, glaze effect, diluted with water	Concrete Protection LF 861, glaze effect, diluted with water
opaque coating, indoors, with e.g. Superlux 3000 <sup>3)</sup>			

<sup>&</sup>lt;sup>1)</sup> Concrete protection LF 861 is optionally available in "Protect quality" – with film protection against algal and fungal infestation.

<sup>&</sup>lt;sup>3)</sup> Follow the instructions in the Concrete Acryl OS 859, Evocryl 200 or Superlux 3000 data sheets about the respective system build-up and substrate requirements. Matching basic color shades in the Creativ Glaze color chart. The base color shades are recommendations for possible designs. In general, the chosen base color shade should be lighter than the glaze to create a cohesive contrast.

Notes	
Color shade effect	The color shade and glaze effect are only clearly visible after drying. Several factors influence the overall effect of Concrete Protection LF 861. Depending on the application technique, layer thickness and substrate roughness, the color shades can vary in effect and intensity. To assess the color shade and glaze effect, we recommend creating test areas in the selected color shade and the desired type of finish before application.
Concrete discolorations	Discolorations may occur on concrete components made of white cement or with white marble aggregates. In these cases, we recommend creating test areas on site and assessing color stability.
No adhesion in the case of salt efflorescence	Permanent adhesion of the coating on surfaces with saline efflorescence cannot be guaranteed.
Lime efflorescence on concrete	There is a risk of lime efflorescence on concrete facade surfaces. A pore-free coating film prevents penetration of external water and minimizes this risk.

Do not use Concrete Protection LF 861 for coating horizontal surfaces due to the increased moisture load. Also do not use it to coat shelves, table tops or seating furniture and do not use in areas exposed to high levels of moisture, e.g. where there is direct exposure to spray water.



**Excluded field of application** 

<sup>&</sup>lt;sup>2)</sup> Glaze coats must be color-matched to the substrate color shade in order to ensure a uniform color effect.

# **Protect quality**

Containers marked with "Protect" contain material that is optimized in the factory with film preservation against algal and fungal infestation. The material may only be used outdoors. The contained preservatives minimize and/or delay the risk of algal and fungal attack. The material in Protect "enhanced by adding film preservation must be applied with sufficient layer thickness. We recommend application of at least two layers in "Protect quality". With the current state-of-the-art technical development, a permanent protection against algal and fungal infestation cannot be guaranteed.

#### Early exposure to moisture

Take suitable measures to protect fresh surfaces from early exposure to moisture. Coats of paint or other coatings that are not fully cured can begin to go white when exposed to moisture. This appearance is typical of the material and does not justify a complaint. After fully curing, this appearance no longer occurs.

#### Protection of the coating

Do not apply in direct sunlight, to substrates that have been heated up, in strong wind, rain, etc. If necessary, take protective measures.

#### Structural protection

Window sills and adequately dimensioned covers prolong the service life of facade coatings. Missing drip edges or drip edges that are too close to each other (according to BFS Leaflet no. 9, Notes I) can lead to visible stains and soiling on facades, balustrades, etc. within a relatively short time.

#### **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.

When a new version of this data sheet with updated information is published, the previous version no longer applies. The current version is available on our website.

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