

Concrete Acryl OS 859

Pure acrylate protective coating in accordance with OS 2 (OS B) and OS 4 (OS C), dull matt, with photocatalytic effect, for exterior use



Farbsystem Basecode

Field of application

For durable, weather-resistant protective coatings on new, old or repaired concrete surfaces in exterior areas. Furthermore, on load-bearing substrates, e.g., exterior plaster, fiber cement, as well as organically bound render, intact emulsion paint coatings, among others. On surfaces exposed to persistent moisture (depending on the location and construction), there is a risk of algae and fungal attacks. We recommend using "Protect Quality" for these surfaces (follow the additional instructions under notes).

Properties

- Water-dilutable
- For exterior use
- Weather-resistant
- With good hiding power
- Dull matt
- Alkali-resistant
- Pure acrylate emulsion base
- With photocatalytic effect
- Tested as surface protection system OS 2 (OS B) and OS 4 (OS C)
- High protective function to aggressive air pollutants
- Can be used on new or repaired concrete surfaces
- Optionally available in "Protect Quality" (film protection against an algal and fungal infestation on the coating)

Material description

Standard color tones	0095 white Light color shades can be mixed with the Brillux Color System. Additional color shades available upon request.
Degree of gloss	Dull matt
Base material	Pure acrylate copolymer

Material description

- Further information** See the information contained in the Declaration of Performance (DoP).
- Density** Approx. 1.48 g/m³
- Packaging** 0095 White: 15 l
Color System: 15 l

Use

- Thinning** Ready for application. Depending on the type of application, weathering and substrate, thin up to max. 5% with water.
- Tinting** Do not tint.
- Compatibility** Can only be mixed with materials stipulated in this data sheet.
- Application** Concrete Acryl OS 859 can be applied using brush, roller and airless spray application. Stir thoroughly before use. For spray application, thin with water as required. More information on spray applications is provided in the “Spray data” tables.
- Consumption** Approx. 130–150 ml/m² per layer for simple facade coatings on smooth substrates. For rough surfaces, the consumption increases accordingly. For protective coatings on concrete, at least two coats are required in accordance with the OS 2 (OS B) or OS 4 (OS C) surface protection system. Follow the additional instructions in the OS 2 or OS 4 DIN V 18026 usage guidelines.
Determine the exact consumption by means of a test application on the object to be coated.
- Application temperature** Do not apply at air, substrate and material temperatures below +8°C and above +30°C, also during the drying period. Apply at temperatures that are at least 3°C above the dew point temperature. The relative humidity must not exceed 80 %.
- Tool cleaning** Clean tools immediately after use with water.

Spray data

Spray system	Nozzle	Spray angle	Pressure	Thinning
Airless	0.021–0.027 inch	40°–80°	160 bar	Approx. 5–10%

Spray data for low-overspray facade coatings

Spray system	Nozzle	Spray angle	Pressure		Thinning	
			Dynamic pressure	Spray pressure	with heating hose	without heating hose
Low-overspray airless spraying	0.027 Inch	40°	150-200 bar	100-130 bar	Undiluted, if applicable up to 5%	Up to 5%

Further information and ordering details for the accessories are available in the “Low-overspray Airless Spraying 2ns2” Data Sheet.

Drying (+20°C, 65% relative humidity)

Can be recoated after approx. 12 hours on simple facade coatings. In system build-up, in accordance with OS 2 (OS B) and OS 4 (OS C): Recoating the Concrete Hydrophobing Agent 823 at +10°C after at least 12 hours drying time, at +30°C after at least 4 hours drying time. Only recoat the PCC Fine Filler 804 at +10°C after at least 24 hours of drying time. At +10°C only recoat Concrete Acryl OS 859 after at least 24 hours drying time, at +30°C only after at least 4 hours drying time. Allow for longer drying time if the temperature is lower and/or the humidity is higher.

Storage

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

Declaration

Notes Contains preservatives. Do not inhale spray mist. Spray application in Protect Quality is possible with low-overspray airless spray applications on vertical surfaces. While doing so, wear suitable protective clothing.

Product code BSW20
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 efflorescences, sintered 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 existing coatings for their suitability, load-bearing capacity, and adhesive properties. Any dirt and unsuitable layers, e.g., elastic and enamel-like coatings as well as defective and unsuitable coatings must be removed using a method suitable for the material, and then disposed of according to regulations. The substrate must be sufficiently rough. Roughen and clean smooth or dense substrates. 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 in a technically correct manner. Repair damaged concrete surfaces with the materials from the Brillux Concrete Protection System. Apply a prime and/or intermediate coat to the substrate, as required. See also VOB Part C, DIN18363, Paragraph 3.

Coating build-up in accordance with surface protection system OS 2 (OS B) ¹⁾

Substrates	Priming	Intermediate coat	Top coat
Intact, porous concrete surfaces	Concrete Hydrophobing Agent 823	Concrete Acryl OS 859	Concrete Acryl OS 859

¹⁾ Follow the application instructions.

Coating build-up

Coating build-up in accordance with surface protection system OS 4 (OS C) ¹⁾

Substrates	Filling	Intermediate coat	Top coat
Intact or repaired concrete surfaces	Entire surfaces with PCC Fine Filter 804	Concrete Acryl OS 859	Concrete Acryl OS 859

¹⁾ Follow the application instructions.

Renovation coating or simple facade coating

Substrates	Prime coat	Intermediate coat	Top coat
Exterior substrate with normal absorption capacity, e.g. exterior plaster (depending on the compressive strength ¹⁾)	Depending on the individual requirements, Priming Concentrate ELF 938, 1 : 4 Thinned or with Lacryl Deep Penetrating Primer ELF 595	Concrete Acryl OS 859	Concrete Acryl OS 859
Exterior substrate with strong absorption capacity, e.g. exterior plaster (depending on the compressive strength - ¹⁾), Concrete ²⁾	Depending on the individual requirements Lacryl Deep Penetrating Primer ELF 595 or Deep Penetrating Primer 545		
Intact organic coatings, e.g., emulsion paints, synthetic resin renders, polymerized resin coatings	Adhesion Primer ELF 3720 ⁴⁾		
New, untreated, asbestos-free fiber cement boards ²⁾	2K-Epoxi Varioprimer 865 or 2K-Epoxi Varioprimer S 864		

¹⁾ Minimum compressive strength > 2.0 N/mm² (compressive strength categories CS II and CS III)

²⁾ For dense, non-absorbent, or low-absorbent concrete, e.g., pre-cast concrete parts, create test applications with Adhesion Primer ELF 3720.

³⁾ Thickly apply the prime coat on all sides, including the interfaces. To coat asbestos-cement facade claddings, follow the instructions in the "Coating systems for asbestos-cement facade claddings 2asb" Data Sheet.

⁴⁾ Prior to the prime coat, prime damaged areas with Deep Penetrating Primer 545 or Lacryl Deep Penetrating Primer ELF 595.

Notes

Light color shades on concrete

To prevent temperature stresses, coatings on reinforced concrete should only be light to medium color shades. This is particularly applicable for concrete surfaces that have already been damaged.

Contiguous surfaces

Only use material from the same batch on contiguous surfaces or mix the required material quantity.

Repairs

Surface repairs become more or less evident depending on the object situation. this is unavoidable, According to BFS Leaflet No. 25, item 4.2.2.1, Para. e, this is unavoidable.

No adhesion for salt efflorescence

No guarantee can be made for long-lasting adhesion of the coating to surfaces with salt efflorescence.

Lime efflorescence on concrete	There is a risk of lime efflorescence on concrete facade surfaces. Water penetration is prevented by an intact coating film, and this risk is minimized. In order to achieve an intact coating, existing pores, craters, and honeycombing must be filled in advance using, e.g., filling with Concrete Pore Filler 782. Crack-bridging coating systems using, e.g., Concrete Finish 839 or Concrete Elast OS 862 must be used on existing cracks.
Coating protection	Do not apply in direct sunlight, substrates that have been heated up, strong wind, rain, etc. If necessary, take protective measures.
Implementation in brilliant and intense color shades	Brilliant, pure intense color shades, e.g., in the yellow, orange, red, magenta, and yellow green areas have a lower hiding power as a result of the pigments used. For critical color shades, we recommend applying a full-covering base coat in these areas in the corresponding base color shade (Basecode). In addition to the standard coating buildup, additional coats may be required.
“Protect Quality”	The quality marked with "Protect" is provided with film preservation against algal and fungal infestations and should therefore only be used on exterior surfaces. The preservatives used minimize and/or delay the risk of algal and fungal attack. For facade paints equipped with film preservation, we recommend applying at least two coats in adequate layer thickness. With the current state of the art, cannot ensure permanent prevention of algal and fungal attack cannot be guaranteed.
Coating horizontal, non-accessible surfaces	To thoroughly protect horizontal, non-accessible coated and absorbent surfaces such as concrete, e.g., balustrades, prime twice with 2K-Epoxy Varioprimer 865 or 2K-Epoxy Varioprimer S 864. Horizontal concrete surfaces must be free of craters and have an adequate run-off slope. Thin the first prime coat corresponding to the substrate absorption up to max. 5% with Epoxy Thinner 854. Scatter Floortec Quartz Sand 1526 onto the second, still-wet prime coat. Wait at least 12 hours between the individual prime coats, but at the most 24 hours of drying time.
New mineral substrates	Only coat new mineral substrates, in particular plaster surfaces (compressive strength category CSII and CSIII), after complete curing and drying, i.e., after 14 days at the earliest; even better, after 4 weeks. Depending on the weather and time of year, the drying process can also take longer.
Glossy streaks in the event of early exposure to moisture	If exposed to moisture too soon after application (condensation or rain), water-soluble wetting agents concentrated on the coating film can be released and appear as glossy streaks on the coating surface. If such streaks occur, do not immediately recoat the surfaces. These water-soluble materials will be washed off by moisture (rain) again in the course of time. However, if immediate recoating is to be performed, thoroughly wash away the streaks or traces with water beforehand. To prevent such streaks, coating work should only be performed under suitable weather conditions.
Constructive protection	Roof overhangs and sufficiently dimensioned covers extend the service life of facade coatings. Missing drip edges or excessively small drip edge separations can (according to BFS Leaflet No. 9, Section I) lead to visible streak marks and soiling on facades, parapets, etc., in 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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