



TECHNICAL DATA SHEET

Description of the product

BETONEX AQUA is an acrylic water based paint for concrete surfaces. It provides **long lasting protection** on constructions that are exposed to adverse weather conditions and offers great **resistance to alkalis**. It is easy to apply and presents great spreading rate and hiding power. The white shade offers high whiteness and the tinted shades have great resistance to UV rays and remain unaltered for years.

Recommended uses

It is applied on exterior surfaces of beton, cement, concrete, plaster etc.

Technical characteristics

Resin: Acrylic resin

Density (white): 1.57 ± 0.05 gr/ml (EN ISO 2811.01-02, 20°C)

Production Viscosity: 95 ± 10 KU (ASTM D 562-05, 25°C)

Storage viscosity: 100 ± 20 KU (ASTM D 562-05, 25°C)

Solids b.w.(white): $69.5 \pm 2\%$ (EN ISO 3251-03)

Solids b.v.(white): $53 \pm 3\%$ (ISO 3233-98)

pH: 8.7 ± 0.9 (ISO 976-96)

Minimum Film Forming Temperature: 20°C (ASTM D 2354)

Packaging stability: 10/10 (1 month, 50°C) (ASTM D 1849-03)

Freeze-thaw stability (-10°C): OK (ELOT 777-85)

VOC (Volatile Organic Compounds): **BETONEX AQUA** belongs to the category A/c WB (Exterior walls of mineral substrate). EU Limit Value: 40 g/l. The ready to use product contains max. 20 g/l.

Shades

Available in white, in 5 ready-made shades and in thousands of shades via the tinting system **CHROMASYSTEM**. It can also be tinted with **CHROTEX BASIC EMULSION COLORANTS** (percentage of addition up to 15% b.w.).

Properties

Hiding power for SR 20 m²/Lt: CR: $93.8 \pm 0.8\%$ (ISO 6504.3-06)

Whiteness index: ≥ 84 (ASTM E 313-05)

Yellowing index: ≤ 2 (ASTM E 313-05)

Water Vapour Transmission Rate (permeability)
(S_D): 0.27 ± 0.02 m (Class II) (ISO 7783.02-99)

CO₂ Permeability (S_D): 122 m. Prevents the carbonation of concrete. (DIN EN 1062.6-02)

Water permeability (W_{24} -value): $0.04 \text{ kg/m}^2\text{h}^{0.5}$ [Class III] (EN ISO 1062.03-99)

Wet scrub resistance: > 7000 cycles (ASTM D 2486-06)

Resistance to liquids (NaOH 5% b.w.):
No change is noted on the film (EN ISO 2812.01-95)

Resistance to weathering:
2 years: No change is noted on the film (EN ISO 2810-05)

Exposure to fluorescent UV & Water:
2000 h: No change is noted on the film (ISO 11507-02)

Gloss 85°: 4 ± 2 (EN ISO 2813-99)

Adhesion (Pull Off, with Primex A-1300 as primer): > 2.0 Nt/mm² (EN ISO 4624-03)

Bend test (Mandrel): 2 mm OK (EN ISO 1519-02)

Recoatability: No change is noted on the film (ELOT 788-85 § 5.4)

Spreading rate

Dry film thickness per coat: 30±3 µm.

Recommended total dry film thickness: 60±6 µm.

Spreading rate: 9.2±1 m²/Lt for complete hiding (2 coats), depending on the type of the surface.

Application instructions

Surfaces are cleaned from dust and flaking parts are removed. Surfaces to be coated for the first time are initially primed with the solvent based primer **PRIMEX A-1300** or with the silicon acrylic water-based primer **PRIMEX MICRO**. Gypsum plastered or dirty surfaces are primed with **MONOX**.

BETONEX AQUA is applied in 2 coats.

Application method: Brush, roller, airless spray.

Diluent: Water.

Thinning: Dilute 5-15% v/v. [Application viscosity: 80±5 KU (ASTM D 562-05) and 1.3±0.3 poise (ICI, ASTM D 4287-05/25°C)].

Tools are cleaned immediately after the application with soap and water.

Drying time

Dry through: 35±10 minutes (ASTM D 1640-03).

Recoating time: 1½±½ hours.

Drying and recoating time may be prolonged under conditions of low temperature and high relative humidity.

Packaging

The white shade is available in 0.75 Lt, 3 Lt and 10 Lt cans.

Storage

1 year, provided the cans remain closed and in normal storing conditions. **BETONEX AQUA** can be stored after opening if the can is kept properly sealed in a cool sheltered place at temperatures 5-30°C.

Health and safety

Please refer to the labeling mentioned on the can. In case more information is needed refer to the Material Safety Data Sheet.

Notes

- It is recommended to avoid the application of the product at temperatures below 2°C or just before rain.
- It is recommended that the coated surfaces shouldn't be washed until 20-30 days have elapsed after the application.
- On fresh concrete surfaces it is recommended to apply the product at least after 30-40 days.
- **BETONEX AQUA BASES** are **ONLY** used for the production of colored shades via **CHROMASYSTEM**. They should not be applied without the special colorants **CHROMATINT**.

*Issued: June 2014
This issue replaces all others*

