

ARTAKRYL sil

TECHNICAL DATA SHEET



Description of the product

ARTAKRYL SIL is a silicon acrylic water-repellent paint. It is strongly recommended for coating and protecting buildings in urban and seaside areas with high humidity. It is completely 'waterproof' and prevents the external humidity and the rainwater to penetrate into the substrate, protecting the walls from cracking. It allows interior moisture to escape through the wall in the environment without entrapping it. It is 'self-cleaning', allowing the rainwater to clean away dust and environmental pollution.

Recommended uses

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

Technical characteristics

Resin: Silicon acrylic resins

Density (white): 1.52±0.04 gr/ml (EN ISO 2811.01, 20°C)

Production Viscosity: 100±6 KU (ASTM D 562, 25°C)

Storage viscosity: 105±15 KU (ASTM D 562, 25°C)

Solids b.w.(white): 64±1.5% (EN ISO 3251)

Solids b.v.(white): 48±3% (ISO 3233)

pH: 8.2±0.7 (ISO 976)

Minimum Film Forming Temperature: 0°C (ASTM D 2354)

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

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

VOC (Volatile Organic Compounds): ARTAKRYL Sil 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. 23 g/l.

Shades

Available in white and in thousands of shades via the tinting system **CHROMASYSTEM**. It may also be tinted with **CHROTEX BASIC EMULSION COLORANTS** (percentage of addition up to 15% b.v.).

Properties

Hiding power for SR 20 m²/Lt: CR: 92±2% (ISO 6504.03)

Whiteness index: ≥ 75 (ASTM E 313)

Yellowing index: ≤ 3.0 (ASTM E 313)

Water permeability (W₂₄-value): 0.23 kg/m²h^{0.5} [Class II] (EN ISO 1062.03)

Water Vapour Transmission Rate (permeability) (S_D): < 0.03 [Class I] (ISO 7783.02)

CO₂ Permeability (S_D): 1.49 m (DIN EN 1062.6)

Wet scrub resistance: > 14000 cycles (ASTM D 2486)

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

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

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

Bend Test (Mandrel): 3 mm OK (EN ISO 1519)

Recoatibility: No change is noted on the film (ELOT 788 § 5,4)

Gloss 85°: 5±2 (EN ISO 2813)

Spreading rate

Dry Film Thickness per coat: 30±3 µm.

Recommended total dry film thickness: 60±6 µm.

Spreading rate: 8±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. Plastered surfaces are primed with the silicon acrylic water-base primer **PRIMEX MICRO** or with the solvent based primer **PRIMEX A-1300**. Gypsum plastered or dirty surfaces are coated with **MONOX**.

ARTAKRYL SII is applied in 2 coats.

Application method: Brush, roller, airless spray.

Diluent: Water.

Thinning: Dilute 5-10% v/v. [Application viscosity: 80±5 KU (ASTM D 562) and 1.3±0.3 poise (ICI, ASTM D 4287/25°C)].

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

Drying time

Dry through: 50±10 minutes (ASTM D 1640).

Recoating time: 2.5±0.5 hours.

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

Packaging

Available in 3 Lt and 10 Lt cans.

Storage

1 year, provided the cans remain closed and in normal storing conditions. ARTAKRYL SIL 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 0°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.
- According to the German specifications for silicon based products, the maximum allowed limit value of $W_{24} \times S_d$ is 0,2 kg/(m.h^{0.5}). For **ARTAKRYL Sil** this value is 0,0069 kg/(m.h^{0.5}).
- **ARTAKRYL Sil** should **NOT** be applied over **ELASTOKRYL**.
- **ARTAKRYL SIL BASES** are **ONLY** used for the production of colored shades via **CHROMASYSTEM**. They should not be applied without the special colorants **CHROMATINT**.

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