Technical Data Sheet

KEIM Concretal®-Lasur

Piamented mineral stain for concrete



1. Product description

Sol-silicate-based, thin-layer coating for providing a low pigment finish when diluted with KEIM Concretal-Dilution (Fixativ) or KEIM Concretal-Base, as well as for opaque thin-layer protective coatings. Complies with DIN EN 1504-2/2.2 when using together with KEIM Silan-100.

2. Field of application

KEIM Concretal-Lasur provides a low-pigment finish on fair-faced interior and exterior concrete surfaces, e.a. to retain the fair-faced appearance. It is commonly used for changing the color completely or simply concealing stains, wide color variations or blending repairs with a concrete color shade. KEIM Concretal-Lasur is also used for providing decorative color wash finishes. KEIM Concretal-Lasur can be diluted as required with KEIM Concretal-Dilution (Fixativ) or KEIM Concretal-Base.

KEIM Concretal-Lasur can also be applied as an opaque thin-layer coatings retaining surface texture and providing protective water and weather resistant finish.

Water-proofing may be further enhanced by providing the substrate with a water-repellent pretreatment using KEIM Silangrund or KEIM Silan-100. The application of KEIM Concretal-Lasur together with KEIM Silan-100 complies with water protection requirements as per DIN EN 1504-2/2.2

KEIM Concretal-Lasur is not as weather resistant on horizontal and slightly inclined surfaces.

Color shade

Shades from KEIM Palette Exclusiv or a custom match to your color selection within our natural mineral range.

3. Product properties

KEIM Concretal-Lasur protects the concrete from the action of weather and also prevents the penetration of aggressive atmospheric pollutants. Surface textures on the concrete, such as shuttering board textures, are fully retained. The surface is mineral matt. At various dilutions with KEIM Concretal-Dilution (Fixativ) or KEIM Concretal-Base, different low-pigment finishes may be achieved or optical problems, such as stains or color differences can be corrected.

- Lightfast, will not fade
- Weather resistant
- Resistant to environmental influences
- Mineral matt finish that lasts
- LEED ves

Technical data

 $1.20 \, g/cm^3$ Density: VOC's (white and tinted) ASTM D6886: < 1g/l $s_d(H_2O) = < 0.01 \text{ m}$ Vapor diffusion resistance: Lightfastness of color pigment: (Fb-Code acc. to BFS technical bulletin No. 26) Non-flammable

Vapor Permeability 75 - 85 perms

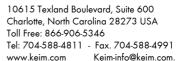
4. Application instructions

Substrate preparation

The substrate must be sound, solid, dry, clean and free of dust, grease, oils, salts, moss, algae and other substances that would prevent bonding. Old resin coatings, loose substrate layers and organically bound coats must be removed. Repair damaged areas using the KEIM Concretal concrete repair system.

For new concrete structures; Concrete should be at least 28 days old and any formwork oil for Concrete, mold lubricating oil, shuttering oil, mold release oil, concrete form oil residues and curing





compounds should be removed with KEIM Concrete Cleaner (Betonschnellreiniger) or by other methods.

Clean, strong concrete without a sinter layer requires no pre-treatment.

Before KEIM Concretal-Lasur is applied, highly absorbent substrates or surfaces exposed to severe weather may be treated with a water-repellent substrate treatment using KEIM Silangrund or KEIM Silan-100 (tested to ZTV-ING) to enhance waterproofing. A subsequent base coat of KEIM Concretal-Lasur may be applied after approx. 4 hours for KEIM Silangrund and after 4 to 12 hours for KEIM Silan-100.

Soft, porous concrete surfaces or existing mineral coats may be stabilized by pre-treatment with KEIM Concretal-Dilution (Fixativ).

Low-pigment coating

In exterior applications, the requirement for weathering resistance requires applying two coats of low pigment coating. For the base and top coat, KEIM Concretal-Lasur may be diluted in any ratio with KEIM Concretal-Dilution (Fixativ) or KEIM Concretal-Base depending on the desired translucency of the finish. It is recommended to coat trial areas in order to determine the dilution ratio. Keep diluted KEIM Concretal-Lasur well stirred before and during work. Neither water nor any other materials may be added. It is important to work swiftly wet-in-wet and to maintain a wet edge to a corner or architectural feature.

Note

The system components Concretal-Lasur, Concretal-Base and Concretal-Dilution (Fixativ) can be mixed together in any desired ratio. KEIM Concretal-Base provides an attractive uniform transparency

together with ideal application consistency and layer thickness. KEIM Concretal-Dilution (Fixativ) allows most translucent low-pigment finishes with brilliant colors and thin layer thickness.

Opaque coating

A base coat plus top coat are necessary in order to obtain an opaque protective coating which retains texture of the surface. this type of application requires 2 coats minimum with the first coat being diluted 10 - 25% with KEIM Concretal-Dilution (Fixativ) and the second coat applied undiluted by brush, roller or spraying, keeping a wet edge. It is important to work swiftly wet-in-wet and to maintain a wet edge to a corner or architectural feature.

Application conditions

Air and substrate temperature: >41°F up to max. 86°F (5°C -30°C) up to max. 80% relative humidity.

Apply only to dry surfaces and in dry weather. Do not apply under direct sun or on sun-heated substrates or in strong wind. Surfaces must be protected after application from rain, wind and direct sun until they are completely cured.

Drying times

At least 12 - 24 hours between coats.

If a pretreatment of one of the following water repellencies was applied allow drying before base coat is applied. Approx. 4 hours after KEIM Silangrund or 4 - 12 hours after KEIM Silan-100.

Consumption

For an opaque finish: 375-625 sq.ft./gallon undiluted

For a low-pigment finish:

Stated values are for diluted ready to use material 375-625 sq.ft./gallon



The quantity of KEIM Concretal-Lasur and KEIM Concretal-Base or KEIM Concretal-Dilution (Fixativ) depends on the mixing ratio. A trial application using the tools and techniques for the final application may be required.

The consumption values given are for guidance and depend on the desired translucency effect, application method and substrate condition. Exact values may only be determined by a trial application on site.

Cleaning of tools

Clean with water immediately after use.

5. Packaging

KEIM Concretal-Lasur

1 gallon

2 gallon

and

4 gallon (packaged in a 5 gal pail)

KEIM Concretal-Dilution (Fixativ)

1.3 gallon (5 l) and 5.3 gallon (20 l) containers

KEIM Concretal-Base

1 gallon and 4 gallon (packaged in a 5 gal pail)

6. Storage

KEIM Concretal-Lasur, KEIM Concretal-Dilution (Fixativ) and KEIM Concretal-Base have a shelf life of 12 months in a closed container and under cool, frost-free conditions.

7. Hazardous substances ordinance class

n/a

8. Transport hazard class

n/a

9. Disposal

EC Waste Code No. 08 01 12 Any residues must be emptied out of containers before recycling.

10. Safety instructions

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children

Product Code: M-SK 01

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.