



KÖSTER LF-VL

Technical Data Sheet CT 271

Issued: 2023-06-16

MPI Aldendorf - test certificate 12 6950-S/13 - single testing for anti-slip characteristics according to DIN 51130 - "R 10"
 -Bremer environmental institute GmbH, 12.10.2012, File Nr. H 5882 FM-1, Emissions testing (VOC) of the epoxy resin coating according to the DIBt principles for the health assessment of construction products

Self levelling industrial floor coating. Solvent free, pigmented, epoxy based

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 13 CT 271 EN 13813:2002 KÖSTER LF-VL Synthetic resin for internal uses
Reaction to fire Release of corrosive substances Water permeability Wear resistance Bond strength Impact resistance Sound insulation Sound absorption Thermal resistance Chemical resistance Dangerous substances	B2 SR NPD ≤ AR 0.5 ≥ B 2.0 ≥ IR 1 NPD NPD NPD NPD

Features

KÖSTER LF-VL is a solvent free, pigmented floor covering for industrial uses. KÖSTER LF-VL is self levelling and possesses a high abrasion resistance.

Technical Data

Consistency	Approx. 2000 mPa*s (+ 23 °C)
Mixing ratio (weight)	5.7 : 1 (A : B)
Pot life	at + 12 °C 60 minutes at + 23 °C 40 minutes
Density	1.34 g / cm ³
Color	approx. RAL 7032: Pebble grey, other colors on request
Application temperature	Minimum + 10 °C
Dew point temp. difference	Minimum + 3 °C
Compressive strength (28 d)	> 50 N / mm ²
Bending tensile strength (28 d)	> 12 N / mm ²
Tensile strength (7 d) on concrete (min. C 50/60)	> 1.5 N / mm ²
The full mechanical and chemical strength is reached after 7 days at + 23 °C and 65% rel. Humidity.	

Fields of Application

KÖSTER LF-VL is a decorative floor covering with high abrasion resistance and can be applied on screed or cement based floors, (minimum tensile strength of the substrate 1.5 N / mm²). KÖSTER LF-VL is suitable for multi-function halls, business rooms, offices, production facilities, garages, and many other areas. The fresh coating can be broadcast with kiln dried quartz sand for slip resistance.

Substrate

The substrate must be dry, free of loose particles as well as free of oil and grease. Contaminated, machine-troweled, and unstable surfaces must be removed down to a coatable layer by shot blasting,

sandblasting, scarifying, or milling. Of these options shot blasting is the superior preparation method. Dust must be removed entirely. Cracks and surface coarseness greater than 5 mm must be filled with a mixture of KÖSTER CT 121 and kiln dried quartz sand. The surface can be worked over after 24 hours.

As primer, a layer of KÖSTER CT 121 (Consumption 300 - 500 g/m²) broadcasted with kiln dried quartz sand (grading curve approx. 0,3 mm) is used. Substrates with high vapor drive or high alkalinity should be treated with KÖSTER VAP I 2000.

Application

Both A and B components must be brought to a temperature between + 15 °C and + 25 °C before application. The components are mixed thoroughly at least 3 min with a mechanical stirring device (below 400 rpm) until a homogeneous consistency is reached.

To avoid defects due to insufficient mixing, repot the material and mix it again. Special care is to be taken that material sticking to the sides of the mixing vessel is mixed in.

After defining the dew point the components are mixed. The surface and room temperature must be at least + 3 °C above the dew point during and for 24 hours after application. Application is done with a squeegee or trowel in two layers. Consumption per layer is 1.3 kg / m². A second layer must be applied within 24 hours of the first. After the material has been emptied onto the substrate, it can be smoothed with a squeegee. Immediately after smoothing the material should be de-aerated with a spiked roller rolled in two directions 90° to another. Spiked shoes must be worn during application while walking over the fresh material.

Consumption

2.6 kg / m² (2 mm total layer thickness)

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner.

Packaging

CT 271 026 26.8 kg combipackage; component A 22.8 kg; component B 4 kg

Storage

Store the material in a dry environment between + 5 °C and + 25 °C. In originally sealed containers it can be stored for a minimum of 12 months.

Safety

Wear gloves and goggles while processing KÖSTER LF-VL.

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

Mixed material must be used immediately and entirely after mixing. **Material residues must be stored outdoors as they develop a high reaction heat and smoke may form**. This also applies to large-volume applications.

Other

Liquid polymers react to temperature fluctuations by changing their viscosity and/or curing behavior. Low temperatures will slow the reaction; high temperatures will accelerate the reaction rate. Mixing large volumes will also increase the reaction rate. Coating work should therefore only be carried out at falling or constant temperatures. The instructions given in the Technical Guidelines must be followed.

A dew point distance of +3 °C must be maintained during and for at least 12 hours after coating work. Coatings must be protected from moisture in all forms until completely cured. At material temperatures below +15 °C the consistency changes - the material becomes more viscous.

Related products

KÖSTER CT 121	Prod. code CT 121
KÖSTER VAP I 2000	Prod. code CT 230
KÖSTER TS transparent	Prod. code CT 320
KÖSTER Color-Chips	Prod. code CT 429
Quartz Sand 0.20 - 0.80 mm	Prod. code CT 482
Quartz Sand 0.06 - 0.36 mm	Prod. code CT 483
Quartz Sand 0.18 - 0.50 mm	Prod. code CT 484
Quartz Sand 0.7 - 1.2 mm	Prod. code CT 485
Quartz Sand 1.0 - 2.0 mm	Prod. code CT 486
Quartz Sand 0.4 - 0.8 mm	Prod. code CT 488
KÖSTER Spiked Roller	Prod. code CT 914 001
KÖSTER Gauging rake	Prod. code CT 915 001
KÖSTER Resin Stirrer 75 mm	Prod. code IN 989
KÖSTER Universal Cleaner	Prod. code X 910 010

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