KÖSTER
Waterproofing Systems

KÖSTER VAP I 2000 FS

Technical Data Sheet CT 233

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- CTL Group, 30. Juli 2012, CTL Project-Nr 281326, ASTM-E 96-10 Standard test method for water vapor impermeability from membranes
- Bremer environmental istitute GmbH, 12.10.2012, File Nr. H 6539 FM-1, Emissions testing (VOC) of the epoxy resin coating according to the DIBt
- LEED Compliance Test By Berkley Analytics, "VOC Emission Test Certificate", Certificate Nr. 170825-02, Aug 25, 2017.

A fast-setting system for the control of moisture and pH on concrete floors to avoid osmotic blistering

CE	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich **13** **CT 233** **EN 13813:2002** **KÖSTER VAP I 2000 FS** **Synthetic resin for internal uses**
Reaction to fire	Efl a)
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	≤ AR 0.5
Bond strength	≥ B 2.0
Impact resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD
Dangerous substances	NPD

Features

Due to its very high interlacing density, KÖSTER VAP I 2000 FS is able to reduce the accumulation of water vapor to such an extent that synthetic resin coatings, synthetic resin adhesives and plastic coverings are not pushed off the substrate. The material displays a good resistance to water, sewage, mineral oil, salt solutions, and diluted acids.

Technical Data

Consistency	low viscous
Mix ratio	(2 : 1) A : B by weight
Density of the mixed material	1.1 g / cm³
Pot life at + 23 °C	approx. 12 min.
Solids content	100%
Flash point	> + 200 °C
Curing time at + 20 °C	approx. 4 hours
Mechanical an chemical final strength at + 23 °C	after 7 days
Application / processing temperature	+ 10 °C – + 30 °C
Max. relative humidity during application/processing	85 %
Earliest water resistance	after 24 hours / + 23 °C
Storage temperature	+ 10 °C – + 25 °C
µ value	172,718
Sd value	77.7 m

Fields of Application

KÖSTER VAP I 2000 FS is a special resin for application on unsealed interior concrete floors such as industrial and multi-purpose halls, offices, hospitals, schools, supermarkets, manufacturing facilities, airplane hangars, storage and retail space, and commercial and residential construction which is exposed to moisture from the underside due to faulty or missing waterproofing of the concrete. It protects against high concrete alkalinity (pH 13 – 14) and serves as a primer by reducing the water vapor diffusion prior to the application of epoxy or polyurethane resin coatings or respectively the adhesion of vapor tight floor coverings such as PVC, rubber, wood, and solid backed carpet.

Substrate

KÖSTER VAP I 2000 FS is used to seal concrete surfaces. The minimum age of the concrete surface to be sealed must be 7 days. The surface to be sealed must be clean, absorbent, free of dust, oil and grease and other adhesion reducing substances. Any kind of surface contamination like adhesives, coatings, curing compounds, efflorescence, dust, grease, oils, etc., have to be removed completely by shot blasting. Smooth concrete surfaces must be roughened by sand or shot blasting. The substrate must have a minimum adhesive tensile strength of 1.5 N / mm². During application and curing the surface must have a minimum + 3° C above the dew point. The concrete must be free of alkali sensitive aggregates, and the surface free of water soluble silicates as often found in surface hardeners, sealing agents, and crystalline waterproofing products.

Application

The two components of KÖSTER VAP I 2000 FS are mixed using an electrical stirring device below 400 rpm until a homogeneous consistency is achieved. To avoid defects due to insufficient mixing, repot the material and mix it again.

KÖSTER VAP I 2000 FS is applied evenly with a roller or squeegee in one coat. The formation of puddles must absolutely be avoided! Concrete surface profile, absorption rate and moisture vapor rates can effect coverage requirements. The substrate must be completely covered with a glossy film. The minimum continuous layer thickness is 0.4 mm. If a second coat is necessary to achieve the minimum layer thickness, it is to be applied between 4 and 24 hours after the first coat.

After a waiting time of min. 4 hours, subsequent work steps such as the application of sealants, coatings or coverings can be carried out. In order to avoid air entrapment, use only solvent free or respectively water free adhesives.

Consumption

Approx. 0.450 kg / m²

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner.

Packaging

CT 233 002	2.95 kg combipackage
CT 233 010	10 kg combipackage

Storage

CT - Coatings

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Store the material at + 10 °C to + 25 °C. If stored in originally sealed packages it can be stored for min. 1 year.

Safety
Wear appropriate Protective Personal Equipment (PPE) when installing the material. Observe all governmental, state, and local safety regulations when processing the material.

Other
Liquid polymers react to temperature fluctuations by changing their viscosity and/or curing behavior. Application should only be carried out during falling or constant temperatures. Low temperatures will slow the reaction; high temperatures and mixing large volumes will increase the reaction rate. Protect the coating form moisture of all kinds during application and curing.

Related products

KÖSTER VAP I 2000	Prod. code CT 230
KÖSTER VAP I 2000 UFS	Prod. code CT 234
KÖSTER Gauging rake	Prod. code CT 915 001
KÖSTER VAP I 06	Prod. code SL 131 009
KÖSTER SL Premium	Prod. code SL 280 025
KÖSTER SL	Prod. code SL 281 025

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