KÖSTER
Waterproofing Systems

KÖSTER CT 121

Technical Data Sheet CT 121

Issued: 2021-08-04

- Test Report from the Institute of Construction materials, building and fire protection, MPA Braunschweig, 1200/535/15, vom 22.05.2017
- Material testing and development GmbH u. Co.KG, Test Certificate Nr. 131044, SRT/17, 28.04.2017, "Method for testing the traction of surfaces: Pendulum test"
- Material testing and development GmbH u. Co.KG, Test Certificate Nr. 128117 - S/17, "Individual test of the slip resistant properties according to DIN 51130".
- Test Report from the Institute of Construction materials, building and fire protection MPA Braunschweig, Classification of the fire properties according to EN 13501-1:2010-1, K-2300/134/17-MPA BS, 24. Februar 2017
- Compatability on wet concrete (EN 13578:2003), IGH Croatia, Test Report No. 72530-PS/059/18

Moisture tolerant, solvent-free epoxy primer for trafficable concrete surfaces (OS-8 System)

CE	**KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 16 CT 121 EN 13813:2002 KÖSTER CT 121 Synthetic resin for internal uses**
Reaction to Fire	E_{fl}
Release of Corrosive Substances	SR
Water vapour permeability	Class III
Abrasion Resistance	≤ AR 0,5
Tensile strength	≥ B 2,0
Resistance to Impact	IR 4
Sound Absorption	NPD
Schalladsorption	NPD
Thermal Insulation	NPD
Chemical Resistance	NPD
Dangerous Substances	SR

CE 0761	**KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 17 CT 121 EN 1504-2:2004 KÖSTER CT 121 Protection against penetration of consituents (1.3) Surface protection product - Coating Physical Resistance (5.1) Resistanc to chemicals (6.1)**
Linear Shrinkage	≤ 0,3%
Compessive strength	Class I ≥ 35 MPa
CO_2 permeability	S_d ≥ 50 m
Water vapour permeability	Class III (S_d ≥ 50 m)
Capillarywater absorption and permeability	w ^{0,5}
Adhesive tensile strength and temperature change compatability	a) no cracks, no blisters, no debonding b) ≥ 2,0 (1,59)
Resistance to strong chemical attack	Buchholz ≤ 50%
Impact resistance	No cracks, no debonding
Abrasion resistance	< 3000 mg
Reaction to fire	Class E_{fl}

Features

KÖSTER CT 121 is a solvent free primer for use on mineral based substrates before the application of KÖSTER CT 221. It is a part of the the KÖSTER OS-8 System. Due to its surface tension it coats the substrate thoroughly and evenly, making it exceptionally suitable for filling surface cracks through saturation, and for leveling surface roughness before final coating. Additionally it can be used as a universal primer for epoxy and polyurethane coatings in interior and exterior application. KÖSTER CT 121 develops an excellent bond to mineral and epoxy substrates. We recommend the use of KÖSTER VAP I 2000 on problematic substrates such as ones with a residual moisture content > 6%.

Technical Data

Mixing ratio	2:1 by weight
Pot life	approx. 60 min.
Working temperature	min. + 15 °C - max + 30 °C
Material temp. during application	min. + 15 °C - max. + 25 °C
Substrate temperature	min. + 8 °C
Density	approx. 1.0 kg/l
Viscosity of mixture (at + 23 °C)	approx. 780 mPa·s
Compressive strength	> 79.1 N/mm² (average)
Bending tensile strength	> 12 N/mm²
Tensile strength (C25/30)	3.9 N/mm² (failure concrete)
CO_2-Permeability	s_D > 200 m
Water vapour permeability	s_D= 175 m (Class III)

Fields of Application

KÖSTER CT 121 is used as a primer for mineral based substrates before applying KÖSTER Epoxy coating and flooring products (after not longer than 48 hours). Mixed with kiln dried quartz sand KÖSTER CT 121 is also used for making trowelable filler material for interior and exterior application for the following application of epoxy and polyurethane coatings. KÖSTER CT 121 is especially suitable as a primer for KÖSTER CT 221 in the KÖSTER OS 8 System.

Substrate

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. The surface and room temperature must be a minimum of + 5 °C. During application and for the first 12 hours of 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.

CT - Coatings

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Application
The material must be conditioned to a temperature between + 15 °C and + 25 °C. The two components 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. Total mixing time is a minimum of 3 minutes. KÖSTER CT 121 is applied evenly with a roller or squeegee in one coat. The formation of puddles must absolutely be avoided! Spread the material with a toothed rake and roll with an epoxy grade roller in two directions. The freshly applied material can be broadcast with kiln-dried quartz sand. Strongly absorbent substrates may require a second application. When installing an OS 8 conform coating refer to the Technical Data Sheet for KÖSTER CT 221.

Scratch coat: mix in ratio 1 : 1 with KÖSTER Quartz Sand 0.06 - 0.36 mm (CT 483 025).

Consumption
400 g / m² (0.4 mm layer thickness)
For use in the OS 8 System see the Technical Data Sheet for KÖSTER CT 221.

Cleaning
Clean tools immediately after use with KÖSTER Universal Cleaner. Cured material must be mechanically removed.

Packaging

CT 121 025	25 kg combipackage; component A 16.66 kg; component B 8.34 kg

Storage
Store frost free between + 5 °C and + 25 °C. In originally sealed containers it can be stored for a minimum of 12 months.

Safety
Avoid inhaling the fumes and skin contact. Wear protective clothing, gloves and goggles during processing and application of the material. Make sure the room is well ventilated. In case of skin contact, wash off the material immediately with lots of soap and water. In case of eye contact, flush eyes immediately and thoroughly with water or preferably an emergency eye wash bottle. Consult a physician. During processing and application of the material, do not eat, smoke, or handle open flames. The warnings and safety recommendations on the packaging and on the Material Safety Data Sheet and the regulations of relevant professional organisations must be observed and obeyed. Observe all governmental, state, and local safety regulations when processing the material.

Other
The maximum grain size of the kiln dried fillers should not exceed 1/3 of the layer thickness. 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.
A dew point distance of + 3 ° C must be maintained during and for at least 12 hours after the coating work. Coatings must be protected from moisture until they are completely dry. At material temperatures below + 15 ° C, the consistency changes - the material becomes thicker.

Related products

KÖSTER LF-BM	Prod. code CT 160
KÖSTER Construction Resin	Prod. code CT 165 025
KÖSTER CT 221	Prod. code CT 221
KÖSTER VAP I 2000	Prod. code CT 230
KÖSTER VAP I 2000 FS	Prod. code CT 233
KÖSTER VAP I 2000 UFS	Prod. code CT 234
Quartz Sand 0.35 - 1.50 mm	Prod. code CT 481
Quartz Sand 0.06 - 0.36 mm	Prod. code CT 483
Quartz Sand 0.4 - 0.8 mm	Prod. code CT 488
KÖSTER Universal Cleaner	Prod. code X 910 010

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