



KÖSTER Corrosion Protection

Technical Data Sheet CT 283

Issued: 2023-09-21

- Test report ILF Magdeburg, No. 211116, Resistance to humidity with alternating climate according to DIN EN ISO 6270-1 (AHT); Salt spray test according to DIN EN 60068-2-11* and DIN EN ISO 9227
 - Test report ILF Magdeburg, No. 211027, test with sulfur dioxide according to DIN EN 6988
 - Drinking water certification 156964 P00746/15 Croatian Department of Public Health and Ecology

Brush, roller or spray applied 2 component solvent free coating for heavy corrosion protection for steel and concrete

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 18 CT 283 EN 13813:2002 KÖSTER Corrosion Protection Synthetic resin for internal uses
Reaction to fire	Efl a)
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	≤ AR 6
Bond strength	≥ B 2.0
Impact resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD
Dangerous substances	NPD

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 21 CT 283 EN 1504-7:2006 KÖSTER Corrosion Protection Product for corrosion protection of reinforcement
Corrosion protection	passed
Glass transition temperature	NPD
Dangerous substances	corresponds 5.3 (see SDB)

Min. layer thickness 250 µm
 Consumption 0.33 kg / m² per 250 µm / layer
 Solids content 100%
 The full mechanical and chemical strength is reached after 7 days (at + 23 °C and 65% relative humidity).

Chemical resistance

Chemical	Long-term contact	Short-term contact (< 2 h.)
Acetone*	+	+
Aromatic ketones according to DIBt test groups	+	+
Gasoline(Super E5)*	+	+
Diesel*	+	+
Ethylene glycol*	+	+
Sodium lauryl sulfates, 15 %	+	+
Potassium hydroxide, 10 %	+	+
Lactic acid, 3 %	-	+
Lactic acid, 5 %	-	+
Lactic acid, 10 %	-	+
Olive oil	+	+
Oleic acid, 100 %	+	+
Phosphoric acid, 30 %	+	+
Sodium chloride	+	+
Potassium chloride	+	+
Calcium chloride	+	+
Sulfuric acid, 1 %	+	+
Sulfuric acid, 10 %	+	+
Sulfuric acid, 20 %	+	+
Sugar	+	+
Toluene*	+	+
Xylene*	+	+
Coca-Cola	+	+
Coffee	+	+

Features

Solvent free epoxy based corrosion protection with excellent adhesion to steel and concrete. KÖSTER Corrosion Protection has high mechanical and chemical resistance.

Technical Data

Consistency	Brush roller and spray applicable
Mixing ratio by weight	3 : 1 (A : B)
Mixed Viscosity	approx. 390000 mPa.s
Pot life at + 12 °C / + 23 °C	30 / 20 min.
Color	Red Other colors available upon request
Density	1.3 g / cm ³
Application temperature	min. + 5 °C
Dew point temperature difference	min. + 3 °C
Compressive strength (28 days)	> 80 N / mm ²
Flexural strength (28 days) on steel (E-Modulus > 190 kN / mm 2,2 mm thickness, Sa 2½):	> 10 N / mm ² > 4.0 N / mm ²

*Electrostatic charges must be avoided for container sealing.

- No change in mechanical properties (discoloration was not considered in the investigation of long-term contact, +60 °C, 50 % rH).
 - This table gives typical results from laboratory experiments under standard conditions. The results are intended as a guide for the designer. Combinations of chemicals in this table may cause different results and require separate consultation.
 - This table is valid until 2.2.2025 or until a new Technical Data Sheet is published.

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.

Fields of Application

Corrosion protection for steel and concrete. KÖSTER Corrosion Protection can be used as a surface protection in facilities which are exposed to high chemical and mechanical stresses such as agricultural plants, waste water plants, or tanks. KÖSTER Corrosion Protection serves as a primer for steel structures in hydraulic steel construction which are to be protected with KÖSTER CT 228 Flex.

Substrate

The substrate must be dry, solid, and free of loose particles and bond inhibiting substances such as oil and grease. Steel surfaces must be prepared according to DIN EN ISO 12944-4 (min. Sa 2 ½, average roughness RY5 50 µm). Weld beads and edges have to be rounded out and can then be covered with KÖSTER CT 228 Flex. When applying to concrete use KÖSTER Polysil TG 500 2C as primer.

Application

Both A and B components must be brought to a temperature between + 15 °C and + 20 °C before application. The components are mixed thoroughly at least 3 min with a mechanical stirring device (below 300 rpm) until a homogeneous consistency and color is achieved.

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 mixing the material is applied using a brush, paint roller, or suitable spray equipment on the freshly prepared surface. The second coat should be applied no later than 12 hours after application of the first. The temperature of the substrate must be at least + 3 °C over the dew point during and for min. 24 hours after application.

Consumption

Approx. 650 g / m² (Stainless steel, 2 layer application, 0.5 mm layer thickness) or approx. 130 g / m² (100 µm) as primer for KÖSTER CT 228 Flex. Consumption on concrete 1.3 kg/m²/mm. Actual consumption depending on surface roughness. Maximum 2 mm layer

Cleaning

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

Packaging

CT 283 006 6 kg combipackage: (A) 4.5 kg, (B)
1.5 kg

Storage

Store the material at temperatures between + 5 °C and + 25 °C. In originally sealed packages the material can be stored for a minimum of 12 months.

Safety

Wear protective gloves and goggles when processing the material. Observe all governmental, state, and local safety regulations when processing the material.

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 228 Flex

Prod. code CT 228

KÖSTER Universal Cleaner

Prod. code X 910 010

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