

PRODUCT INFORMATION

COROFLAKE KTW-W

PRODUCT DESCRIPTION

COROFLAKE KTW-W is a two-component polymer coating based on a solvent free epoxy resin. The cured coating system is approved for the direct contact with food or drinking water and offers good chemical resistance to many media which are used in the food and beverage industry. **COROFLAKE KTW-W** cures with a smooth surface.

COATING LAYERS CONSUMPTION

The coating system consists of the two-component **COROFLAKE KTW-W PRIMER** and at least two coats of the two-component **COROFLAKE KTW-W** topcoat applied at approx. 200 - 500 µm DFT per coat.

On concrete surfaces a reinforced laminate layer (2 x 300 g/m² glass mats) with a base layer is additionally required.

FIELDS OF APPLICATION

COROFLAKE KTW-W is used especially for the protection of concrete and steel components which are exposed from mild to corrosive conditions. Typical applications are the corrosion protection of drinking water tanks, vessels in the food and beverage industry as well as components in the water treatment industry.

APPROVALS & CERTIFICATES

- KTW-Certificate
- Certificate according DVGW - worksheet W 270
- Certificate of suitability for aqueous food in accordance with the guidelines CFR 21§ 175.300 of the Food and Drug Administration (FDA)

FEATURES

- Suitable for food and drinking water
- Good chemical resistance
- Curing even at high humidity
- Application by spraying, brushing or rolling

CHEMICAL RESISTANCE

Information on the chemical resistance properties is available upon request.

SUBSTRATE

Substrates are components made of steel, concrete, screed or plaster. Components to be coated shall be designed and manufactured in accordance with EN 14879-1. For components made of concrete, screed or plaster DIN 1045 must also be observed.

SURFACE PRE-TREATMENT C-STEEL

Surfaces to be coated must be clean, dry and free of contaminants. All contaminants, including non-visible detectable contaminants, must be removed in accordance with DIN TR 55684 and EN ISO 8502.

Non-alloyed steel surfaces shall be abrasive blasted to "Near White Metal" in accordance with EN ISO 12944-4. A surface preparation degree of SA 2½ (SSPC-SP 10; NACE No. 2) as specified in EN ISO 8501-1 and a "medium (G)" roughness degree as specified in EN ISO 8503-2 must be achieved. A minimum surface profile of R_z ≥ 70 µm is required.

To prevent flash rust, the primer must be applied immediately after the blasting and cleaning of the substrate or the component must be air conditioned to a relative humidity of ≤ 40%.

CONCRETE

Appropriate action shall be taken to prepare the concrete surfaces; dry and free of dust and free of contaminants such as oil or grease. The concrete shall have minimum tensile strength of 1.5 N/mm² and minimum compressive strength of 25 N/mm². The residual moisture content must not exceed 4%.

ENVIRONMENTAL CONDITIONS

Throughout the coating process, the temperatures of the substrate and coating materials shall be maintained within the range specified by TIP TOP. All surfaces shall be maintained at a temperature at least 3K above the dew point in order to prevent condensation.

APPLICATION

During the application of the product, the application instruction must always be observed.

COROFLAKE KTW-W PRIMER and each **COROFLAKE KTW-W** topcoat are applied to the substrate using an airless air spray system or by rolling or brushing.

In case **COROFLAKE KTW-W** is applied by brushing or rolling, additional coats may be required to achieve the required total DFT.

Note: During application, the lined surface should be shaded from direct or indirect sunlight whenever possible. In atmospheric exposure coatings based on epoxy resins have the tendency to chalking with time.

MIXING RATIO

The primer and coating components are supplied in pre-measured units so that weighing or measuring of the components is kept to a minimum. After the unit has been mixed it shall be used within the specified pot life.

Primer	Parts by Weight	Parts by Volume
COROFLAKE KTW-W PRIMER COMP. A	100	100
COROFLAKE KTW-W PRIMER COMP. B	44	52

Coating	Parts by Weight	Parts by Volume
COROFLAKE KTW-W COMP. A	100	100
COROFLAKE KTW-W COMP. B	37	46

CONSUMPTION PER COAT

Product	Thickness [µm]	Coverage [g/m ²]
COROFLAKE KTW-W PRIMER	covering	ca. 300 (concrete)
COROFLAKE KTW-W	500	ca. 700

The information about coverage is an average for spray applications.

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POT LIFE / WORKING TIME [min]

Product	15°C	20°C	30°C
COROFLAKE KTW-W PRIMER	ca. 50	ca. 35	ca. 15
COROFLAKE KTW-W	ca. 60	ca. 45	ca. 25

RECOAT TIME (20°C)

Product	Min. [h]	Max. [Days]
COROFLAKE KTW-W PRIMER	ca. 24	ca. 3
COROFLAKE KTW-W	ca. 24	ca. 3

CLEANING

Clean all equipment with **SOLVENT T-200** immediately after use. Frequency of cleaning will depend upon amount applied, temperature and elapsed time, including any delays.

SAFETY MEASURES

The material safety data sheets of the individual components, the safety instructions on the packing (label) as well as the legal requirements for handling hazardous materials must be observed.

PACKING UNITS

The products are supplied in the following standard package sizes:

Product	Size	Article No.
COROFLAKE KTW-W PRIMER COMP. A	10 kg	590 2240
COROFLAKE KTW-W PRIMER COMP. B	4,4 kg	590 2200
COROFLAKE KTW-W COMP. A - WHITE	17 kg	590 2211

Technical Data	Standard	Unit	Value
Hardness Shore D	DIN ISO 48-4 (ASTM D2240)	-	≥ 80
Min. Adhesion Strength Concrete	EN ISO 4624 (ASTM D7234)	N/mm ²	1.5*
Min. Adhesion Strength Steel	EN ISO 4624 (ASTM D4541)	N/mm ²	7
Test Voltage (earliest after 24 hours)	EN 14879-2	kV / 100µm DFT	0.5 (steel)
Max. Operating Temperature Liquids	-	°C	+40

* Depending on the concrete strength

Note: The indicated temperatures are dependent on the present load and may vary

Product	Size	Article No.
COROFLAKE KTW-W COMP. A - GRAY	17 kg	590 2221
COROFLAKE KTW-W COMP. B	6,3 kg	590 2231
SOLVENT T-200	4 kg	590 0610
SOLVENT T-200	8 kg	590 0611

STORAGE

The products must be stored in a cool and dry place, away from direct sunlight. At the specified storage temperatures a shelf life of the products is given of at least for the following periods:

Product	Temperature	Shelf Life
COROFLAKE KTW-W PRIMER COMP. A	5 - 25°C	12 Months
COROFLAKE KTW-W PRIMER COMP. B	5 - 25°C	12 Months
COROFLAKE KTW-W COMP. A	5 - 25°C	12 Months
COROFLAKE KTW-W COMP. B	5 - 25°C	12 Months
SOLVENT T-200	5 - 25°C	60 Months

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof. In addition, the DIN 7716 must be observed.

Information given in the fact sheet above corresponds to the current knowledge available to us regarding our products at the time of its drafting and is intended as a guideline for informational purposes. However, because of the multiple possibilities regarding possible applications, processing and on site conditions, any information given in the fact sheet above is not legally binding, in particular, without being limited to, such information shall not be interpreted as a warranty of merchantability or of fitness for a particular purpose. Customer therefore is advised to conduct its own testing or make an inquiry with our technical department before ordering. We reserve the right to change the product at any time, in particular, without being limited to, minor changes because of advancements in technology. If by way of exception, the information given in the fact sheet above is incorporated by reference into any contract concluded with us under German Law, such information, shall only be interpreted as determining the specific requirements of the contractual products as set out in § 434 BGB (German Civil Code) and shall not be interpreted as constituting a guarantee of condition.

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