PRODUCT INFORMATION COROFLAKE 300 M

PRODUCT DESCRIPTION

COROFLAKE 300 M is a combination of a fibreglass mat reinforced laminate lining with a filled topcoat, both based on a high chemical and thermal resistant epoxy resin. Due to the excellent mechanical properties, **COROFLAKE 300 M** can cover cracks up to 0.3 mm according to DIBt (German Institute for Construction Technology) guidelines.

COATING LAYERS CONSUMPTION

The laminate lining is consists of the two-component primer, the three-component basecoat, the two-component reinforced layer with one 300 g/m² fibreglass mat as well as one 26 g/m² C-glass surface veil and at least two coats of the two component COROFLAKE 300 topcoat. The total applied DFT is based on the chemical and thermal load present and can be up to approx. 2.0 - 3.0 mm.

FIELDS OF APPLICATION

Due to its good crack bridging properties, **COROFLAKE 300** \mathbf{M} is ideal for use of concrete structures such as floors, trenches and pits which are exposed to acids and lye.

COROFLAKE 300 M is characterized by a very good resistance to concentrated sulphuric acid and 50% sodium hydroxide.

FEATURES

- Easy to apply
- Solvent free
- · Excellent chemical resistance to lye and acids
- Outstanding adhesion to steel and concrete

CHEMICAL RESISTANCE

Information on the chemical request is available on request.

SUBSTRATE

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

SURFACE PRE-TREATMENT

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.

Trowel applies the basecoat onto the primed substrate at approx. 1.0 - 1.5 mm. Upon placement of the basecoat, the 300 g/m² fibreglass mat is pressed onto the surface and saturated by roller with resin mixture. Afterwards a 26 g/m² C-glass surface veil is pressed onto the surface and saturated by roller with resin mixture. Finally two coats of **COROFLAKE 300** are applied in DFT of 400 - 600 μ m per coat as final topcoat. The **COROFLAKE 300** topcoat is applied using an airless air spray system.

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. Under the load of concentrated sulphuric acid a colour change can occur. Therefore, the colour Terra should always be used for the last layer.

MIXING RATIO

The primer and coating components are supplied in premeasured 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 |
|------------------|--------------------|-----------------|
| LINING 300 RESIN | 100 | 100 |
| HARDENER No. 8 | 33 | 35.8 |

| Basecoat | Parts by Weight | Parts by Volume |
|------------------|--------------------|-----------------|
| LINING 300 RESIN | 100 | 100 |
| HARDENER No. 8 | 33 | 35.8 |
| FILLER F1 | 310 | 330 |

| Laminate Layer | Parts by Weight | Parts by Volume |
|------------------|--------------------|--------------------|
| LINING 300 RESIN | 100 | 100 |
| HARDENER No. 8 | 33 | 35.8 |

| Topcoat | Parts by Weight | Parts by Volume |
|-----------------------|--------------------|--------------------|
| COROFLAKE 300 COMP. A | 100 | 100 |
| COROFLAKE 300 COMP. B | 40 | 43.5 |

CONSUMPTION

| CONCOMI TION | | |
|-------------------|---|-------------------|
| Layer | Product | Coverage [g/m²] |
| Primer | LINING 300 RESIN | ca. 300 |
| Doggood | LINING 300 RESIN | ca.1000 |
| Basecoat | FILLER F1 | ca. 2400 |
| | LINING 300 RESIN + hardener | ca. 660 |
| Laminate Layer | 1 x Fibreglass mat 300 g/m ² | ca. 330 |
| Layer | 1 x C-glass surface veil 26 g/m² | ca. 30 |
| Topcoat | COROFLAKE 300 | ca. 500 - 750* |

^{*} Per layer

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POT LIFE / WORKING TIME [min]

| Product | 15°C | 20°C | 30°C |
|------------------|--------|--------|--------|
| LINING 300 RESIN | ca. 45 | ca. 30 | ca. 15 |
| COROFLAKE 300 | ca. 50 | ca. 35 | ca. 20 |

RECOAT TIME (20°C)

| Product | Min. [h] | Max. [Days] |
|------------------|----------|-------------|
| LINING 300 RESIN | ca. 12 | ca. 7 |
| COROFLAKE 300 | ca. 12 | ca. 7 |

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 300 COMP. A - BEIGE | 18 kg | 590 2320 |
| COROFLAKE 300 COMP. A - TERRA | 18 kg | 590 2300 |
| COROFLAKE 300 COMP. B | 7.2 kg | 590 2340 |
| C-glass surface veil - 26 g/m² | 250 m ² | 590 9800 |
| E-Glass mat - 300 g/m² | 20 m ² | 590 0222 |
| E-Glass mat - 300 g/m ² | 20 m ² | 590 0239 |

| Product | Size | Article No. |
|------------------------------------|-------------------|-------------|
| E-Glass mat - 300 g/m ² | 50 m ² | 590 0246 |
| FILLER F1 | 25 kg | 591 0140 |
| HARDENER No. 8 | 2.48 kg | 590 3790 |
| LINING 300 RESIN | 7.5 kg | 590 3780 |
| 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 300 COMP. A | 5 - 25°C | 12 Months |
| COROFLAKE 300 COMP. B | 5 - 25°C | 12 Months |
| FILLER F1 | - | 24 Months |
| HARDENER No. 8 | 5 - 25°C | 12 Months |
| LINING 300 RESIN | 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.

| Technical Data | Standard | Unit | Value |
|---|------------------------------|----------------|-------|
| Hardness Shore D | DIN EN ISO 48-4 (ASTM D2240) | - | 82 |
| Min. Adhesion Strength Steel | EN ISO 4624 (ASTM D4541) | N/mm² | 7 |
| Test Voltage (earliest after 24 hours) | EN 14879-3 | kV / 100µm DFT | 0.5 |
| Max. Operating Temperature Liquids | - | °C | +60 |
| Max. Operating Temperature Dry (Flue Gas) | - | °C | +95 |

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

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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