# Technical Data Sheet
# StoCrete TK

Protection against corrosion for the reinforcement, polymer-modified, cementitious

## Characteristics

**Area of application**

- as an anti-corrosion coat for reinforcing steel
- method 11.1 in accordance with EN 1504-9

**Properties**

- polymer-modified, cementitious protection against corrosion
- very good adhesion to reinforcing steel
- very good protection against corrosion

**Information/notes**

- product is in accordance with EN 1504-7
- Component of the StoCretec systems in accordance with the DAfStb (German) Repair Guideline 2001-10, ZTV-ING, ZTV-W LB 219

## Technical data

| Criterion | Standard / test specification | Value/ Unit | Notes |
|---|---|---|---|
| Maximum particle size | | 0.4 mm | |

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

## Substrate

**Requirements**

Requirements on the substrate:
The concrete substrate must be load-bearing and free from native and foreign substances that could interfere with adhesion, as well as from corrosion-promoting components (e.g. chlorides). Remove less strong layers and laitance.

Damp in accordance with the definition in the DAfStb (German) Repair Guideline 2001-10.

Reinforcing steel:
Preparation grade of the exposed reinforcing steel after substrate preparation: Sa 2½ in accordance with EN ISO 8501-1.

**Preparations**

Prepare the substrate using a suitable mechanical process, such as abrasive blasting or high-pressure water blasting (> 800 bar).
Open pores and blow-holes sufficiently.

Blast exposed reinforcement steels.

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| Application | | |
|---|---|---|
| **Application temperature** | Lowest application temperature: +5 °C<br>Highest application temperature: +30 °C | |
| **Time for application** | StoCrete TK grey:<br>At +5 °C: approx. 90 minutes<br>At +23 °C: approx. 60 minutes<br>At +30 °C: approx. 45 minutes<br>StoCrete TK light grey:<br>At +5 °C: approx. 120 minutes<br>at +23 °C: approx. 90 minutes<br>at +30 °C: approx. 60 minutes | |
| **Mixing ratio** | 5 kg of material in accordance with the description / 0.9 - 1.0 l water = 1.0 : 0.18 - 0.20 parts by weight | |
| **Material preparation** | 1) Decant water into a container and then add the pre-blended dry mortar.<br>2) Stir for approx. 2 minutes.<br>3) Allow to mature for approx. 3 minutes.<br>4) Remix for approx. 0.5 minutes.<br>If the material is no longer brushable, stir again. | |
| **Consumption** | Type of application | Approx. consumption |
| | per layer depending on the Ø of the reinforcing steel | 0.13 - 0.20 kg/m |
| | Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project. | |
| **Coating build-up** | 1) Derust reinforcement<br>2) Protection against corrosion using StoCrete TK grey and StoCrete TK light grey in 2 or 3 application cycles | |
| **Application** | by paint brush<br><br>If reprofiling manually.<br><br>1) Substrate preparation<br>Derust the exposed reinforcing steel in accordance with DIN EN ISO 12944-4 up to preparation grade Sa 2½. The derusted reinforcing steel must be free from dust and grease.<br><br>2) Corrosion protection | |

Derust the reinforcing steel in accordance with DIN EN ISO 12944, part 4. Then immediately coat it with StoCrete TK in two application cycles.
Use a paint brush to coat the reinforcing steel evenly and without gaps.

The waiting time between each individual application cycle is 4.5 hours at normal temperatures.
The protection against corrosion must have hardened on the reinforcing steel to an extent that it cannot be loosened from the reinforcing steel during application cycle 2.

Application cycle 1: StoCrete TK grey
Application cycle 2: StoCrete TK light grey

3) Reprofiling using StoCrete GM, StoCrete GM QS, or StoCrete SM in accordance with the relevant Technical Data Sheet.
Or

3) Mineral bonding agent
After a waiting time of 4.5 hours, apply StoCrete TH 200 or StoCrete TH 250 bonding agent to the prepared substrate in accordance with the Technical Data Sheet.

4) Reprofiling
Reprofile using ready mixed mortar StoCrete TG 202, StoCrete TG 203, StoCrete TG 204, StoCrete TG 252, or StoCrete TG 254 in the fresh bonding agent in accordance with the Technical Data Sheet.

If reprofiling, apply using dry-mix or wet-mix sprayed mortar.

1) Substrate preparation
Derust the exposed reinforcing steel in accordance with DIN EN ISO 12944-4 up to preparation grade Sa 2½. The derusted reinforcing steel must be free from dust and grease.

2) Corrosion protection
Derust the reinforcing steel in accordance with DIN EN ISO 12944, part 4. Then immediately coat it with StoCrete TK in three application cycles (if using SPCC spray application).
Use a paint brush to coat the reinforcement steels evenly and without gaps.

The waiting time between each individual application cycle is 4.5 hours at normal temperatures.
The protection against corrosion must have hardened on the reinforcing steel to an extent that it cannot be loosened from the reinforcing steel during the next application cycle.

Application cycle 1: StoCrete TK grey
Application cycle 2: StoCrete TK light grey

| | |
|---|---|
| | Application cycle 3: StoCrete TK grey<br><br>3) Reprofiling<br>reprofiling using StoCrete TS 100, StoCrete TS 102, or StoCrete TS 108 dry-mix sprayed mortar in accordance with the relevant Technical Data Sheets<br>or<br><br>3) Reprofiling using wet-mix sprayed mortar StoCrete TS 200, StoCrete TS 203, StoCrete TS 250, or StoCrete LM in accordance with the relevant Technical Data Sheet. |
| **Cleaning the tools** | Clean with water immediately after use. Hardened material can only be removed mechanically. |
| **Notes, recommendations, special information, miscellaneous** | The declaration(s) of performance can be obtained from the StoCretec Technisches InfoCenter<br>General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual. |

## Delivery

**Packaging** sack

| Article number | Name | Container |
|---|---|---|
| 00432-001 | StoCrete TK light grey | 5 kg bag |
| 00431-001 | StoCrete TK grey | 5 kg bag |

## Storage

| | |
|---|---|
| **Storage conditions** | Store in dry and frost-free conditions. |
| **Storage life** | In the original container until ... (see packaging).<br>This product has a low chromate content.<br><br>The product quality is best guaranteed in its unopened original container until its shelf life has expired. The first digit of the batch number is the final digit of the year. The second and third digits indicate the calendar week. Example: 1450013223 - shelf life until end of calendar week 45 in 2021.<br>For further explanation, see the price list. |

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## Certificates/approvals

| | | |
|---|---|---|
| | Z-74.11-91 | SPCC concrete replacement system StoCrete TS 203 for the restoration of LAU facilities<br>National technical approval |

## Identification

| | |
|---|---|
| **Product group** | Protection against corrosion |
| **Safety** | This product is subject to compulsory labelling in accordance with the current EU regulation.<br>You will receive an EU Safety Data Sheet with your first order.<br>Please observe the information regarding the handling of the product, its storage, and disposal. |

## Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.

StoCretec GmbH
Gutenbergstr. 6
D-65830 Kriftel

Tel.: +49 6192 401-104
Fax: +49 6192 401-105
stocretec@sto.com
www.stocretec.de