

# Technical Data Sheet

## StoCrete TK

Protection against corrosion for reinforcement,  
polymer-modified, cementitious



### Characteristics

**Area of application** • as protection against corrosion for reinforcing steel

**Properties** • polymer-modified, cementitious protection against corrosion (PCC)  
• 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-WLB 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 have a separating action, 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:  
Cleanliness 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.

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Bevel the edges of the areas of spalling under approx. 45°.

Blast exposed reinforcement steels.

### Application

**Application temperature**      Lowest application temperature: +5 °C  
Highest application temperature: +30 °C

**Time for application**              StoCrete TK grey:  
At +5 °C: approx. 90 minutes  
At +23 °C: approx. 60 minutes  
At +30 °C: approx. 45 minutes  
StoCrete TK light grey:  
At +5 °C: approx. 120 minutes  
At +23 °C: approx. 90 minutes  
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.  
2) Stir for approx. 2 minutes.  
3) Allow to mature for approx. 3 minutes.  
4) Remix for approx. 0.5 minutes.  
If the material is no longer brushable, stir again.

Consumption	Type	Approx. consumption	
	as protection against corrosion for reinforcing steel up to Ø 18 mm, layer 1 grey	0.13	kg/m
	as protection against corrosion for reinforcing steel up to Ø 18 mm, layer 2 light grey	0.14	kg/m
	as protection against corrosion for reinforcing steel up to Ø 18 mm, layer 3 grey	0.13	kg/m
	as protection against corrosion for reinforcing steel over Ø 18 mm, layer 1 grey	0.15	kg/m
	as protection against corrosion for reinforcing steel over Ø 18 mm, layer 2 light grey	0.16	kg/m
	as protection against corrosion for reinforcing steel over Ø 18 mm, layer 3 grey	0.15	kg/m
	layer 3: only if using spray application, in accordance with application information		

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

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specific project.

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### Coating build-up

- 1) Derust reinforcement
  - 2) Protection against corrosion using StoCrete TK grey and StoCrete TK light grey in 2 or 3 application cycles
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### Application

by paint brush

If reprofiling manually.

#### 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) Protection against corrosion

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.

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#### 2) Protection against corrosion

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

#### 3) Reprofiling

Reprofiling using dry-mix sprayed mortar StoCrete TS 100, StoCrete TS 102, StoCrete TS 108, StoCrete TS 118, or StoCrete TS 154 in accordance with the relevant Technical Data Sheet.

Or

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 Conformity can be obtained from the StoCretec Technisches InfoCenter  
General application instructions can be found at [www.stocretec.de](http://www.stocretec.de) (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.

#### 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).

This product has a low chromate content. We guarantee this property until maximum storage life expires. Please observe the guaranteed storage life data on

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the batch no. shown on the container.

Explanation of batch number: e.g. 6050017152

In this example, storage life until the end of week 05 in 2016 is guaranteed (digit 1 = last digit of the year, digits 2 + 3 = calendar week). For further explanation, see the price list.

#### Certificates/approvals

P-56.1-9903	Concrete replacement system "Sto Ingenieurbausystem" General building inspection test certificate
ZERT 9 IV 10/621	Sto Ingenieurbausystem Certificate of Compliance
P-22-ibac	StoCrete TS 200 General building inspection test certificate
ZERT 9 III 10/617	StoCrete TS 200 Certificate of Compliance
P-56.3-0719	Concrete replacement system StoCrete TS 102 General building inspection test certificate
ZERT 9 III 11/643	Concrete replacement system StoCrete TS 102 Certificate of Compliance
P 5031/07-331	Sto Ingenieurbausystem 3 General building inspection test certificate
ZERT 9 I 12/654	Sto Ingenieurbausystem 3 Certificate of Compliance
P-56.3-9904	Concrete replacement system StoCrete TS 100 for M 2 General building inspection test certificate
P-56.3-9905	Concrete replacement system StoCrete TS 100 for M 3 General building inspection test certificate
P 5817/09-360	StoCretec PCC II.1 System General building inspection test certificate
ZERT 9 IV 10/619	StoCretec PCC II.1 System Certificate of Compliance
P 6390/10-362	Sto Ingenieurbausystem 2 General building inspection test certificate
ZERT 9 III 11/641	Concrete replacement system StoCrete TS 100 Certificate of Compliance
ZERT 9 III 11/642	Concrete replacement system StoCrete TS 100 for M 3 Certificate of Compliance
ZERT 9 III 10/615	Sto Ingenieurbausystem 2 Certificate of Compliance
P 6390/10-361	Sto Ingenieurbausystem 4 General building inspection test certificate
ZERT 9 I 11/628	Sto Ingenieurbausystem 4 Certificate of Compliance
BAW-2007-07-1	StoCrete TS 118 confirmation of usability in accordance with the Federal Waterways Engineering and Research Institute (BAW) Code of
P 5818/10-363	SPCC concrete replacement system StoCrete TS 203 General building inspection test certificate

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ZERT 9 IV 10/620

SPCC concrete replacement system StoCrete TS 203  
Certificate of Compliance

### Identification

**Product group** Protection against corrosion

### Safety

This product is not subject to compulsory designation in accordance with the current EU directive.  
You will receive an EU Safety Data Sheet with your first order.  
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.

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