

# Technical Data Sheet

## StoPma CS 100

PMMA binder, industry, very high compressive strength



### Characteristics

- Area of application**
- as a decorative coloured sand coating
  - as a smoothable coating filled with colour sands 3-4 mm
  - resistant to hot water up to +60 °C
  - on concrete, cementitious screed

- Properties**
- PMMA
  - rapid curing
  - very high compressive strength

- Appearance**
- colour of the colour sands

- Information/notes**
- StoPma CS 100 is used as a binder to produce coatings in food-processing areas that can be smoothed using a trowel

### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Flexural strength	DIN 196-1	28 N/mm <sup>2</sup>	filled approx. 1:3
Compressive strength	DIN 196-1	95 N/mm <sup>2</sup>	filled approx. 1:3
Viscosity (at 23 °C)	DIN 53015	270 - 330 mPa.s	
Density (mixture 23 °C)	DIN 51757	0,98 g/cm <sup>3</sup>	

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** Concrete or cementitious screed: Additives and curing compounds can lead to incompatibility. Test the compatibility of StoPma CS 100 with the respective substrate on the project.

- General:
- Dry, load-bearing
  - Free from separating, native, or foreign substances
  - Remove weak layers.
  - Remove any accumulation of fine concrete particles on the surface.

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**Dry substrate:**

- Depends on the compressive strength class
- Dry in accordance with the definition in EN 1504-10

**Moisture content:**

- Measure the moisture content of the concrete substrate with a calcium carbide meter.
- Moisture content for concrete qualities up to C30/37: max. 4 CM per cent
- Moisture content for concrete qualities up to C35/45: max. 3 CM per cent

Substrate temperature: at least +10 °C, 3 K above the dew point

Bond strength, average: 1.5 N/mm<sup>2</sup>

Bond strength, lowest single value: 1.0 N/mm<sup>2</sup>

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**Preparations**

Prepare all the above-mentioned substrates using a mechanical method, see "Substrate, requirements".

**Example:**

- Shot-blasting
- Milling followed by shot-blasting
- Abrasive blasting
- Diamond grinding

**Roughness depths:**

- Reduce roughness depths >1.5 mm, e.g. by diamond-grinding.

**Note:**

- Only use system-compatible StoCretec PCC mortars and StoPox Mörtel standfest to profile larger recesses or defects and to create inclinations or seamless backgrounds.
- Information about system-compatible PCC mortars is available from the StoCretec Technisches InfoCenter.

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**Application****Application temperature**

minimum temperature: +5 °C  
maximum temperature: +35 °C

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**Time for application**

at +20 °C: approx. 12-15 minutes

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**Mixing ratio**

The amount of catalyst required depends on the temperature of the material and the substrate.

+30 °C: 1.5 weight per cent StoPma KAT 300 (15 g/kg binder)

+20 °C: 2.0 weight per cent StoPma KAT 300 (20 g/kg binder)

+10 °C: 3.0 weight per cent StoPma KAT 300 (30 g/kg binder)

+5 °C: 6.0 weight per cent StoPma KAT 300 (60 g/kg binder)

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#### Material preparation

1) Stir the material.

Note: The paraffin must spread evenly.

2) Add exactly the right amount of catalyst.

3) Mix the components. Mixing paddle: slow running mixer, maximum 300 rpm, Mixing time: at least 1 minute

4) Apply the mixture immediately.

#### Consumption

Type	Approx. consumption	
StoPma CS 100	0,4	kg/m <sup>2</sup> /mm
coloured sand approx. 0.5-1.0 mm	1,6	kg/m <sup>2</sup> /mm

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

as a trowelable coating, 3-4 mm

1) Priming: StoPma GH 100

2) Scatter: quartz sand 0.3–0.8 mm

3) Coating: StoPma CS 100

4) Sealing: StoPma TC 100

#### Application

as a trowelable coating, 3-4 mm

Recommendation: thickness of the industrial floor coating for forklifts and lift trucks: minimum 4 mm

1) Priming: StoPma GH 100

- Application: See the Technical Data Sheet.

2) Scatter: with quartz sand 0.3-0.8 mm, full-faced

3) Coating: StoPma CS 100

- StoPma CS 100, approx. 22 percent by weight

- Mix in the colour quartz sand with a grain size of 0.5-1.0 mm. approx. 78 weight per cent

- Mix in the catalyst. weight proportion in per cent: approx. 1-6 weight per cent, depending on the temperature

- Pour the mixture on to the surface and distribute it. tools squeegee, bucket trowel

- Do not de-air the coating with a spiked roller.

- consumption: approx. 2.0 kg/m<sup>2</sup>/mm in total

- Note: StoPma CS 100 can be reworked after 90 minutes. Suction clean the surface.

4) Transparently seal: StoPma TC 100

- StoPma TC 100, weight proportion in per cent: 100 weight per cent

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- Mix in the catalyst. weight proportion in per cent: approx. 1-5 weight per cent, depending on the temperature
- Pour the sealer onto the surface and distribute it immediately in a criss-cross pattern. Tools: roll

#### Cleaning the tools

Clean tools with StoDivers EV 100 or StoCryl VV.  
Leave tools to air-dry for 30 minutes before using again.

#### Notes, recommendations, special information, miscellaneous

Observe the general application instructions:  
- see [www.stocretec.de](http://www.stocretec.de), Products  
- see technical manual, notes

ordering address for coloured quartzes:  
Gebrüder Dorfner GmbH & Co.  
Kaolin- und Kristallquarzsand- Werke KG  
Scharhof 1  
D-92242 Hirschau  
E-mail: [info@dorfner.com](mailto:info@dorfner.com)  
[www.dorfner.com](http://www.dorfner.com)

#### Delivery

Article number	Name	Container
01425-002	StoPma CS 100	25 kg pail
01425-001	StoPma CS 100	190 kg vat (bar)

#### Storage

##### Storage conditions

Store in dry and frost-free conditions. Protect from direct sunlight.  
Avoid temperatures above +25 °C.

##### Storage life

The product quality is best guaranteed in its unopened original container until its shelf life has expired. This information is included in the batch number on the container. Explanation of batch nos.:  
digit 1 = last digit of the year, digits 2 + 3 = calendar week, example: 2450013223 - storage life ends at week 45 in 2022  
See product packaging

#### Identification

##### Product group

Binders

##### GISCODE

RMA10

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### Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.

Observe the Safety Data Sheet!

Safety instructions refer to the ready-to-use, unapplied product.

### 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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