Technical Data Sheet
StoCryl V 100

Coating, mid sheen

Characteristics

Area of application

- as a rigid coating for the protection and coloured decoration of concrete structures (concrete and reinforced concrete)

Properties

- prevents the ingress of water and harmful substances dissolved in water
- regulates the moisture balance
- good penetration capacity
- increases electrical resistivity
- very good adhesive bond
- good carbon dioxide impermeability (S_d value for CO_2 > 50 m)
- good water vapour diffusion capacity (S_d value for H_2O < 4 m)
- water-dilutable

Appearance

- mid sheen (G2) in accordance with EN 1062-1

Information/notes

- product is in accordance with EN 1504-2
- not suitable for horizontal surfaces in contact with water
- not suitable for surfaces subject to foot or vehicle traffic
- surface protection system OS 2 (OS B), OS 4 (OS C)
- for the coloured decoration of concrete areas as part of the StoCretec concrete repair system in building structures
- not suitable for rooms that are used for purposes similar to living quarters

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Density	EN ISO 2811	1.25 - 1.45 g/cm³	
Diffusion-equivalent air layer thickness	EN ISO 7783	1.3 m	V2 medium
Water permeability rate w	EN 1062-1	< 0.1 kg/(m²$h^{0,5}$)	
Water vapour diffusion-equivalent air layer thickness µ	EN ISO 7783	10,000	average value
Gloss	EN 1062-1	Mid sheen	G2
Dry layer thickness	EN 1062-1	130 µm	E3 > 100; ≤ 200
Grain size	EN 1062-1	< 100 µm	S1 fine

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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 substrate must be dry, load-bearing, and free from native and foreign release agents.
Remove less strong layers and laitance.

Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent for C35/45 concrete, measured with a calcium carbide meter.

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.

Application

Application temperature

Lowest application temperature: +8 °C
Highest application temperature: +30 °C

Material preparation

Ready-to-use, stir thoroughly before application.

Consumption

Type of application	Approx. consumption	
as coating (2 layers)	0.3 - 0.4	l/m²

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

DAfStb (German) Repair Guideline OS 2 (OS B)
1) Substrate preparation
2) Hydrophobic prime coating with StoCryl GW 100
3) Intermediate coat of StoCryl V 100, diluted approx. 5 wt% with water
4) Finish of StoCryl V 100, undiluted

DAfStb (German) Repair Guideline OS 2 (OS B)
1) Substrate preparation
2) Hydrophobic prime coating of StoCryl HP 100
3) Intermediate coat of StoCryl V 100, diluted approx. 5 wt% with water
4) Top coat of StoCryl V 100

	DAfStb (German) Repair Guideline OS 4 (OS C) 1) Substrate preparation 2) Fairing coat of StoCrete TF 200, StoCrete TF 204 3) Intermediate coat of StoCryl V 100, diluted approx. 5 wt% with water 4) Top coat of StoCryl V 100
Application	
	DAfStb (German) Repair Guideline OS 2 (OS B) 1) Substrate preparation 2) Hydrophobic prime coating StoCryl GW 100 The hydrophobic impregnation of the prepared concrete substrate with StoCryl GW 100 is applied by brush or roller. Consumption StoCryl GW 100: approx. 0.2 - 0.25 l/m² per application cycle (diluted material) 3) Intermediate coat: StoCryl V 100 After stirring well, dilute StoCryl V 100 QS with max. 5 % water, stir well once again, and apply manually or by machine. Consumption StoCryl V 100: approx. 0.15 l/m² 4) Finish StoCryl V 100 After stirring well, apply StoCryl V 100 undiluted. Consumption StoCryl V 100: approx. 0.15 l/m² DAfStb (German) Repair Guideline OS 2 (OS B) 1) Substrate preparation 2) Hydrophobic prime coating of StoCryl HP 100 The hydrophobic impregnation of the prepared concrete substrate with StoCryl HP 100 is applied by brush or roller. Consumption StoCryl HP 100 0.2-0.25 l/m² per application cycle (diluted material) 3) Intermediate coat of StoCryl V 100 After stirring well, dilute StoCryl V 100 QS with max. 5 % water, stir well once again, and apply manually or by machine. Consumption StoCryl V 100: approx. 0.15 l/m² 4) Finish StoCryl V 100 After stirring well, apply StoCryl V 100 undiluted manually or by machine. Consumption StoCryl V 100: approx. 0.15 l/m² DAfStb (German) Repair Guideline OS 4 (OS C) 1) Substrate preparation 2) Fairing coat StoCrete TF 200 or StoCrete TF 204

Apply StoCrete TF 200 or StoCrete TF 204 fairing coat in accordance with the relevant Technical Data Sheet.

3) Intermediate coat of StoCryl V 100
After stirring well, dilute StoCryl V 100 QS with max. 5 % water, stir well once again, and apply manually or by machine.
Consumption StoCryl V 100: approx. 0.15 l/m²

4) Finish StoCryl V 100
After stirring well, apply StoCryl V 100 undiluted manually or by machine.
Consumption StoCryl V 100: approx. 0.15 l/m²

If applying the material manually, use a paint brush or roller.

If applying the material by machine, use the following:
Airless:
Nozzle size: 0.019 - 0.021"
Nozzle size: 0.49 - 0.53 mm
Spray angle: 40° - 50°

Pressure: approx. 140 - 180 bar
Hose length 15 m, max. 100 m - continuously supplied paint roller applicator up to 140 m
Addition of water: max. 5 %

Note: If delivered in large containers, no addition of water is required (ready-to-use).

Inomat M8:
Hose size - Ø ¾
Device setting level 4 (for a 10 m hose, max. hose length is 100 m)

Note: Apply undiluted using a continuously supplied paint roller applicator.

Drying, curing, ready for next coat

Drying and waiting times:

Time until the area is no longer sensitive to rain and humidity:
At +8 °C: after 6 h
At +20 °C: after 4 h
At +30 °C: after 2 h

Until application of the next layer:
At +8 °C: after 24 h
At +20 °C: after 12 h
At +30 °C: after 5 h

Until bond strength is tested:

	At +8 °C: after 7 days At +20 °C: after 5 days At +30 °C: after 3 days
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 General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual. Protective colloids/streaking: If there is premature contact with water (condensation or rain) after application, water-soluble protective colloids may be released from the coating film and appear as glossy streaks on the coating surface. Because the processing aids remain water-soluble, subsequent contact with water (e.g. due to thawing, rain) washes them off as a matter of course. This does not impair the quality of the dried coating. Hiding power: Depending on the selected colour shade, e.g. intense yellow or intense red, differences in hiding power can occur. An extra application cycle can therefore be useful, in addition to the application cycles listed in the "Coating build-up" section of the Technical Data Sheet. The hiding power of the colour shades mentioned above can be increased by pre-coating the surface with a colour shade with better hiding power that is matched to the selected colour shade.

Delivery

Colour shade	white, tintable in accordance with the StoColor System, RAL colour fan
Packaging	pail

Article number	Name	Container
01729-020	StoCryl V 100 tinted	15 l pail
01729-001	StoCryl V 100 white	15 l pail

Storage

Storage conditions	Store in dry and frost-free conditions. Protect from direct sunlight.
Storage life	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.

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Identification

Product group	Coating

Safety	Observe the Safety Data Sheet! For further information on handling the product, its storage and disposal, see EU Safety Data Sheet.

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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