SILIKAL® HK 20 / HK 21 coving paste

Reactive methacrylate coving paste



SILIKAL® HK 20 / HK 21 coving paste is a formulated ready-to-use methacrylic-based paste for the easy manufacture of covings.

Application

SILIKAL® HK 20 / HK 21 coving paste is outstandingly suitable for the manufacture of indoor covings in both dry and wet areas when applied with SILIKAL® Filler FM, FS or SILIKAL® Filler QS 0.7 – 1.2 mm. The hardening time of the almost non-yellowing coving paste is about 40 minutes at +20 °C. It can be used at temperatures ranging from 0 °C to +35 °C, enabling application to progress rapidly. For coating thickness of more than 10 mm, a first half thick cove must be installed for curing as to avoid any overheating. The final coving to follow as soon as the first layer has cooled down. For covings thicker than 20 mm and for all outdoor covings SILIKAL® R17-thix mortar must be used.

Advice on application

The mixing ratio is 15 kg of SILIKAL® Filler FM, FS or SILIKAL® Filler QS 0.7 - 1.2 mm and 5 kg of SILIKAL® HK 20 / HK 21 coving paste. The quantity of filler can be varied from 12 - 18 kg according to the material and ambient temperature in order to ensure individual application or stability.

This batch is sufficient for approx. 8 – 10 m of coving at a height of 10 cm.

Under no circumstances should other untested additives be added to the mixture.

Mixing the coving paste

The corresponding quantity of SILIKAL® Filler FM, FS or SILIKAL® Filler QS 0.7 – 1.2 mm as well as SILIKAL® Hardening Powder is added to the SILIKAL® HK 20 / HK 21 coving paste as indicated in the "Hardener dosages" table, all mixed together intensively for about one minute using a high-speed propeller agitator. You must remember that the hardening powder has to be mixed in with the coving paste first before the filler is added.

The pot life at normal temperatures is about 15 minutes, the hardening time about 40 minutes. The values indicated will vary according to the ambient temperature.

Guideline recipe and batch quantities

Item	Component	Guideline recipe (% by weight)	Comments	Batch for 10 litre bucket	
1	SILIKAL® HK 20 / HK 21 coving paste	25 %		3 kg	3 litres
2	SILIKAL® Filler FS, FM or QS	75 %		9 kg	approx. 6 litres
	Total:	100 %	Average consumption: 1.85 kg per litre Coving volume	12 kg	approx. 6.5 litres
3	SILIKAL® Hardening Powder	1,5 – 5 % related to item 1	See "Hardener dosages" table for quantities	45 – 150 g	

Characteristics of HK 20 / HK 21 as delivered

Property	Measuring method	Approx. value HK 20	Approx. value HK 21
Viscosity at +20 °C		Pasty	Pasty
Flow time at +20 °C, ISO 4 cup	DIN 53 244	N/A	N/A
Density D ₄ ²⁰	DIN 51 757	1.02 g/cm ³	1.02 g/cm ³
Flash point	DIN 51 755	+10 °C	+10 °C
Pot life at +20 °C (2.5 % pbw. hardening powder)		approx. 15 min.	approx. 12 min.
Application temperature		0 °C to +35 °C	0 °C to +35 °C

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Characteristics of HK 20 / HK 21 in the hardened state (1:3 filled)

Property	Measuring method	Approx. value
Density	DIN 53 479	1.85 g/cm ³
Compressive strength	DIN 1164	40.0 N/mm ²
Tensile strength in bending	DIN 1164	17.0 N/mm ²
Modulus of elasticity	DIN 53 457	2100 N/mm ²
Water absorption, 4 days	DIN 53 495	125 mg/(50 · 50 · 4 mm)
Water vapour permeability	DIN 53 122	$1.05 \cdot 10^{\text{-11}} \text{ g/cm} \cdot \text{h} \cdot \text{Pa}$

Hardener dosages HK 20

Temperature	Hardening powder % pbw. *	Pot life approx. min.	Hardening time approx. min.
0 °C	5.0	20	60
+10 °C	4.0	15	50
+20 °C	2.5	15	40
+25 °C	2.0	12	30
+30 °C	1.5	10	30

Hardener dosages HK 21

Temperature	Hardening powder % pbw. *	Pot life approx. min.	Hardening time approx. min.
0 °C	5.0	15	50
+10 °C	4.0	15	40
+20 °C	2.5	12	30
+25 °C	2.0	10	30
+30 °C	1.5	10	25

^{*} The quantity of hardening powder is always related to the quantity of resin.

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Other applicable documents	Data sheet	Page
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To further information, please refer to the separate product information sheet "SILIKAL® Hardening Powder".