



**Facade paint, water-based, matte
highly wet-scrub resistant, water repellent, breathable
improving opacity**

Basis Styrene acrylate

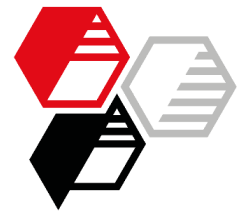
		Control PCC	SILFIT Z 91
	F 10401.1	[23]	[24]
Component A	Demineralized water	250	250
	Natrosol 250 HR (1)	2	2
	Ammonia 25 %	2	2
	Dispex AA 4030 (2)	2	2
	Calgon N neu, 10 % in water (3)	3	3
	Parmetol MBX (4)	2	2
	Foamaster MO 2134 (2)	2	2
	Propylene glycol : Butyl diglycol : Texanol (1 : 1 : 1)	30	30
Component B	Kronos 2190 (5)	150	150
	Omycarb 5 GU (6)	180	180
	Finntalc M15 (7)	50	50
	Precipitated calcium carbonate (PCC)	100	---
	SILFIT Z 91 (8)	---	100
Component C	Acronal S 790 (2)	220	220
	Foamaster MO 2134 (2)	3	3
	Acticide MKB 3 (9)	10	10
	Rheovis PE 1330 (2)	12	12
	Demineralized water	12	12
Total parts by weight		1030	1080

Recommendation SILFIT Z 91 instead of commonly used precipitated calcium carbonate:
 - markedly improved water vapor permeability
 - optimized wet-scrub resistance
 - enhanced hiding power for EU Ecolabel compliant higher spreading rate
 - with further cost reduction potential

Mixing
 - component A: charge water and add Natrosol, let swell approx. 30 min while stirring
 - add remaining ingredients of component A and stir for another 5 min
 - premix and add component B, disperse by dissolver under cooling with water
 - complete by component C and stir for another 5 min



		Vergleich PCC	SILFIT Z 91	
F 10401.1		[23]	[24]	
Technical Data	Solids content w/w	%	58.7	58.7
	Titanium dioxide content w/w	%	14.6	14.6
	PVC	%	60.9	61.1
	Dynamic viscosity, 23 °C			
	at 0.1 s ⁻¹	Pa·s	11.4	10.8
	at 1000 s ⁻¹	Pa·s	0.21	0.20
	Storage stability 6 months, 23 °C		very good	very good
Properties	Color d/8°, DIN 5033-1			
	L*		96.4	96.1
	a*		-0.5	-0.4
	b*		2.5	2.6
	Hiding power, ISO 6504-3			
	Spreading rate at contrast ratio 98 %	m ² /l	5.5	6.3
	Wet-scrub resistance, ISO 11998			
	Abrasion loss after 200 cycles	µm	3.7	2.8
	<i>determined on samples applied by a doctor blade</i>			
	<u>Classification along with DIN EN 1062-1</u>			
Degree of gloss, ISO 2813		G3 matte	G3 matte	
Gloss 85°	GU	2.7	3.5	
Water vapor permeability				
Class		V2 medium	V2 medium	
Water vapor transmission rate	g/(m ² *d)	28	54	
Diffusion equivalent air layer thickness	m	0.72	0.38	
<i>wet cup method, DIN EN ISO 7783, 400 ml/m², applied in two layers</i>				
Liquid water permeability				
Class		W3 low	W3 low	
Water absorption coefficient	kg/(m ² *h ^{0.5})	0.034	0.067	
<i>DIN EN 1062-3, 400 ml/m², applied in two layers</i>				



F 10401.1

Suppliers

- (1) Ashland
- (2) BASF
- (3) BK Giulini
- (4) Vink Chemicals
- (5) Kronos International
- (6) Omya
- (7) Elementis
- (8) HOFFMANN MINERAL
- (9) Thor

More information on this topic:

[Silfit Z 91 vs. Precipitated Calcium Carbonate](#)

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