



**Interior dispersion paint, no co-solvent, dull matte  
good opacity, wet-scrub resistant  
reducing titanium dioxide**

**Basis** Straight acrylic dispersion

		Control	80 pbw SILFIT Z 91 -21 % TiO <sub>2</sub>	60 pbw SILFIT Z 91 -28 % TiO <sub>2</sub>	100 pbw SILFIT Z 91 -28 % TiO <sub>2</sub>	80 pbw SILFIT Z 91 -28 % TiO <sub>2</sub>
F 10402.1		[8]	[4]	[11]	[6]	[12]
<b>Component A</b>	Demineralized water	300	300	300	300	300
	Natrosol 250 HBR (1)	4	4	4	4	4
	Caustic soda solution 20 %	2	2	2	2	2
	Dispex AA 4135 (2)	3	3	3	3	3
	Calgon N neu, 25 % in water (3)	2	2	2	2	2
	Parmetol MBX (4)	1	1	1	1	1
	Foamaster MO 2134 (2)	2	2	2	2	2
<b>Component B</b>	Tiona 828 (5)	190	150	135	135	135
	SILFIT Z 91 (6)	---	80	60	100	80
	Arbocel B 600 (7)	---	---	---	---	20
	Plustalc H15 (8)	20	20	20	20	20
	Micro Mica W1 (9)	50	50	50	50	50
	Omyacarb 2 GU (9)	65	65	65	65	65
	Omyacarb 5 GU (9)	165	165	165	165	165
<b>Component C</b>	Foamaster MO 2134 (2)	2	2	2	2	2
	Acronal ECO 6270 (2)	180	180	180	180	180
	Demineralized water	14	14	14	14	14
Total parts by weight		1000	1040	1005	1045	1045

**Recommendation** [4] high opacity  
 [11] balanced property profile, titanium dioxide savings  
 [6] high opacity with high cost reduction potential  
 [12] good opacity, good wet-scrub resistance, 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

The properties were determined on films applied with a doctor blade.



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<b>Technical Data</b>	Solids content w/w	%	59.0	60.6	59.2	60.8	60.8	
	Titanium dioxide content w/w	%	19.0	14.4	13.4	12.9	12.9	
	PVC	%	65.7	68.5	67.1	69.0	69.7	
	Dynamic viscosity, 23 °C							
	at 0.1 s <sup>-1</sup>	Pa·s	40.8	37.0	35.0	35.0	48.0	
	at 1000 s <sup>-1</sup>	Pa·s	0.15	0.13	0.13	0.12	0.16	
	Storage stability 6 months, 23 °C		good	good	good	good	good	
<b>Properties</b>	Color d/8°, DIN 5033-1							
	L*		96.2	96.2	96.0	96.2	95.9	
	a*		-0.4	-0.4	-0.4	-0.3	-0.4	
	b*		2.7	2.6	2.8	2.7	2.7	
<b><u>Classification along with DIN EN 13300</u></b>								
Degree of gloss, ISO 2813		Class		dull matte				
Gloss 85°		GU	3.4	4.0	4.1	4.2	3.6	
Wet-scrub resistance, ISO 11998								
Class			2	2	2	3	2	
Abrasion loss after 200 cycles		µm	13	19	17	24	16	
Hiding power, ISO 6504-3								
Class			2	2	2	2	2	
Spreading rate at contrast ratio 98 %		m <sup>2</sup> /l	6.6	7.3	6.6	7.3	7.1	
<b>Suppliers</b>	(1)	Ashland						
	(2)	BASF						
	(3)	BK Giulini						
	(4)	Vink Chemicals						
	(5)	Tronox						
	(6)	HOFFMANN MINERAL						
	(7)	J. Rettenmaier & Söhne						
	(8)	Elementis						
	(9)	Omya						

**More information on this topic:**

[Silfit Z 91 as Titanium Dioxide-Extender in Solvent-free Straight Acrylic Paints](#)

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