



Electrodeposition coating, cathodic, black good corrosion resistance, good mechanical properties

Basis Epoxy resin

Pigment preparation	L00013.1		Base formulation
	-- part 1 --		
	Demineralized water		380.75
	Acetic acid 30 %		20.00
	Resydrol EM 6642w/55BG	(1)	181.75
	-- part 2 --		
	Surfynol 104 BC	(2)	17.50
	-- part 3 --		
	Special Black 4	(3)	36.50
	Neuburg Siliceous Earth, various types	(4)	363.50
Total parts by weight		1000.00	

Bath formulation	Resydrol EZ 6635wcat/35WA	(1)	339.25
	Demineralized water		598.25
	Pigment preparation		62.50
	Total parts by weight		1000.00

Recommendation

SILLITIN Z 86
Improved storage stability of the pigment preparation at 38 °C, reduced roughness of the vertical surface, slightly higher impact

SILLITIN P 87
Improved storage stability of the pigment preparation at 38 °C, slightly reduced roughness of the vertical surface and L-Panel horizontal side

AKTISIL PF 777
Best storage stability of the pigment preparation at 38 °C, matting, best gloss retention L-panel horizontal side, slightly higher impact

SILFIT Z 91
Improved storage stability of the pigment preparation at 23 °C, very strong improvement in corrosion protection, prevention of pitting at the scribe

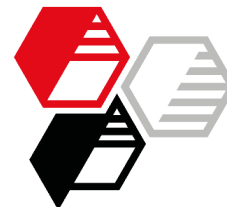
AKTIFIT VM
Best storage stability of the pigment preparation over a long period at 38 °C, very strong improvement in corrosion protection

AKTIFIT PF 111
Best storage stability of the pigment preparation over a long period at 38 °C, very strong improvement in corrosion protection

AKTIFIT PF 115
Best storage stability of the pigment preparation over a long period at 38 °C, very strong improvement in corrosion protection, highest Impact



		SILLITIN		AKTISIL		SILFIT		AKTIFIT	
		Z 86	P 87	PF 777	Z 91	VM	PF 111	PF 115	
		[9]	[11]	[12]	[26]	[25]	[19]	[22]	
L00013.1									
Technical Data	Solids content w/w	%				15.1			
	Pigment-binder-ratio					0.2			
Properties	Pigment preparation after 1 d dynamic viscosity @ 23 °C								
	1 s ⁻¹	Pa·s	3.85	3.11	21.50	1.63	1.57	2.35	5.97
	100 s ⁻¹	Pa·s	2.54	1.70	2.67	0.69	0.58	0.76	2.99
	Pigment preparation								
	Storage stability @ 38 °C	d	56	56	168	28	56	168	168
	Gloss 60°	GU	60	68	49	49	51	18	54
	Δ Gloss 60° between vertical and horizontal surface (L-effect)	Δ GU	36	23	17	22	20	21	34
	Roughness	Ra	0.39	0.38	0.47	0.45	0.39	0.41	0.46
	Roughness L-panel area 2	Ra	0.58	0.37	0.59	0.71	0.70	0.52	0.55
	Cupping test Erichsen	mm	5.3	5.7	4.4	6.1	6.1	4.9	6.6
	Impact Test (907g Ø 12,7 mm) ASTM D2794 - 93	inch- pound	14	18	16	24	24	14	32
	<u>Salt spray test DIN EN ISO 9227 NSS, 1000 h</u>								
	Rating according to DIN EN ISO 4628-8								
	Corrosion					Grad 0-1			
	Delamination					Grad 0-1			
	Area of pitting	mm²	0.23	0.65	0.21	0	0	0	0.71
Mixing	Pigment preparation								
	- Present part 1 and mix until clear								
	- Add part 2 and mix until clear								
	- Slowly add part 3 and grind in a bead mill with counter cooling for 10 min								
	Bath formulation								
	- While stirring, add the pigment preparation to the other components and homogenize								



L00013.1

Application	Substrate	cold-rolled, zinc phosphate stell Chemetall Type Gardobond 26S 6800 OC
	Deposition data	2 min, 280 - 300 V
	Curing conditions	25 min 180 °C
	Dry film thickness	35 µm

Suppliers	(1)	Allnex
	(2)	Evonik Industries
	(3)	Orion Engineered Carbons
	(4)	HOFFMANN MINERAL

More information on this topic:

[Neuburg Siliceous Earth in black cathodic electrodeposition paints](#)

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