

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

**Basis** Epoxy resin

	L00013.1	Base formulation
<b>Pigment preparation</b>	-- 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

<b>Bath formulation</b>	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

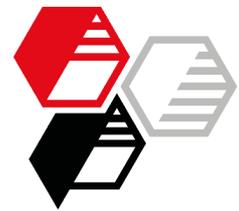
Best storage stability of the pigment preparation over a long period at 38 °C, very strong improvement in corrosion protection

#### AKTIFIT PF 111

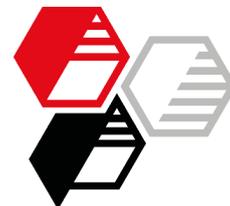
Best storage stability of the pigment preparation over a long period at 38 °C, very strong improvement in corrosion protection

#### 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										
<b>Technical Data</b>	Solids content w/w	%				15.1				
	Pigment-binder-ratio					0.2				
<b>Properties</b>	Pigment preparation after 1 d									
	dynamic viscosity @ 23 °C									
	1 s <sup>-1</sup>	Pa·s	3.85	3.11	21.50	1.63	1.57	2.35	5.97	
	100 s <sup>-1</sup>	Pa·s	2.54	1.70	2.67	0.69	0.58	0.76	2.99	
	Pigment preparation	d		56	56	168	28	56	168	168
	Storage stability @ 38 °C									
	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	mm <sup>2</sup>	0.23	0.65	0.21	0	0	0	0.71		
<b>Mixing</b>	Pigment preparation									
	<ul style="list-style-type: none"> <li>- Present part 1 and mix until clear</li> <li>- Add part 2 and mix until clear</li> <li>- Slowly add part 3 and grind in a bead mill with counter cooling for 10 min</li> </ul>									
<b>Mixing</b>	Bath formulation									
	<ul style="list-style-type: none"> <li>- While stirring, add the pigment preparation to the other components and homogenize</li> </ul>									

L00013.1

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<b>Application</b>	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

<b>Suppliers</b>	(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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