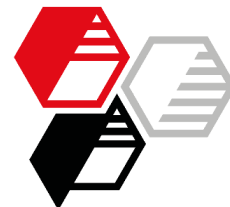



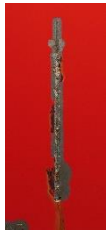










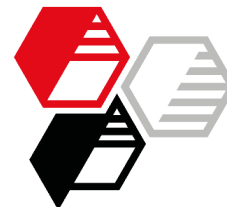
Electrodeposition coating, cathodic, red Single-layer, good corrosion protection, e. g. ACE-coating

Basis Acrylate hybrid

		Control	SILLITIN Z 86	SILLITIN Z 89	SILLITIN P 87	AKTISIL VM 56/89
	L 00058.1	[1]	[5]	[6]	[7]	[9]
Pigment preparation	-- part 1 --					
	Viacryl VSC 6292w/38WA (1)	360	360	360	360	360
	-- part 2 --					
	Texanol (2)	20	20	20	20	20
	Butyl glycol	6	6	6	6	6
	-- part 3 --					
	Demineralized water	285	220	220	220	220
	-- part 4 --					
	Surfynol 104, 1:1 in methoxypropanol (3)	20	20	20	20	20
	-- part 5 --					
	Paliogen Red L 3910 HD (4)	105	70	70	70	70
	Kronos 2190 (5)	75	50	50	50	50
	SILLITIN Z 86 (6)	---	125	---	---	---
	SILLITIN Z 89 (6)	---	---	125	---	---
	SILLITIN P 87 (6)	---	---	---	125	---
	AKTISIL VM 56/89 (6)	---	---	---	---	125
	-- part 6 --					
	Acetic acid 30 %	12	12	12	12	12
	Demineralized water	117	117	117	117	117
	Total parts by weight	1000	1000	1000	1000	1000
Bath formulation	Demineralized water	624	624	624	624	624
	Acetic acid 60 %	1	1	1	1	1
	Viacryl VSC 6292w/38WA (1)	250	250	250	250	250
	Pigment preparation	125	125	125	125	125
	Total parts by weight	1000	1000	1000	1000	1000
Recommendation	<u>SILLITIN Z 86</u>					
	- good corrosion protection, best price-performance					
	<u>SILLITIN Z 89</u>					
	- high gloss, high color neutrality, high storage stability					
	<u>SILLITIN P 87</u>					
	- high gloss, high gloss consistency even on geometrically complex structures (L-effect)					
	<u>AKTISIL VM 56/89</u>					
	- high gloss, high color neutrality, high storage stability, good corrosion protection					



			Control	SILLITIN Z 86	SILLITIN Z 89	SILLITIN P 87	AKTISIL VM 56/89
L 00058.1			[1]	[5]	[6]	[7]	[9]
Technical Data	Solids content w/w	%	13.6	14.4	14.4	14.4	14.4
	Pigment-binder-ratio		0.20	0.27	0.27	0.27	0.27
Properties	Color d/8°	L*	43.9	43.7	43.7	43.8	43.8
	Color d/8°	a*	47.9	47.4	47.2	47.2	47.1
	Color d/8°	b*	20.9	21.3	21.1	21.1	21.0
	Gloss 60°	GU	76	66	70	72	73
	Δ Gloss 60° between vertical and horizontal surfaces (L-effect)	Δ GU	4	14	11	8	13
<u>Salt spray test DIN EN ISO 9227 NSS, 500 h</u>							
Delamination at scribe	mm		6.2	3.1	4.7	3.6	2.4
							
Delamination at edge	mm		2.6	2.3	2.2	2.6	2.1
							
<u>Humidity test DIN EN ISO 6270-2 CH, 1000 h</u>							
Coating damages DIN EN ISO 4628			all: characteristic values 0 (no changes)				
Cross-cut test 1 mm, after tape tear-off immediately			all: 0				
after 24 h			all: 0				
Stone impact test DIN EN ISO 20567-1B			all: Rating 1				
Impact test (1kg Ø 20 mm) DIN EN ISO 6272-1	cm		all: ≥ 50				
Pendulum hardness Koenig	s		all: > 160				
Cross-cut test 1 mm, after tape tear-off			all: 0				
Cupping test Erichsen	mm		all: > 6.5				



L 00058.1

Mixing

- Pigment preparation
- Present part 1, counter-cool
 - Premix part 2 and add to part 1, mix for 5 min
 - Add part 3
 - Premix part 4, melt Surfynol 104 for this, add the mixture to the batch
 - Part 5 stir in and grind for 5 min in a bead mill
 - Premix part 6 and add slowly drop by drop, continue grind for 15 min

- Bath formulation
- While stirring, add the pigment preparation to the other components
 - Homogenize overnight

Application

- | | |
|---------------------|---|
| Substrate: | cold-rolled, zinc phosphated steel
Chemetall Type Gardobond 26S W OC |
| Deposition data: | 2 min, 20 A, 260 - 290 V, 32°C |
| Curing conditions: | 35 min 170°C |
| Dry film thickness: | ~35 µm, single-layer |

Suppliers

- (1) Allnex
- (2) Eastman Chemical Company
- (3) Evonik Industries
- (4) Sun Chemical
- (5) Kronos International
- (6) HOFFMANN MINERAL

More information on this topic:

[Neuburg Siliceous Earth in cathodic electro deposition coatings acrylate single-layer red](#)

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