

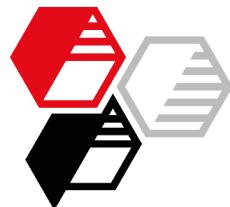
Electrodeposition coating, cathodic, red
Single-layer, good corrosion protection, e. g. ACE-coating

Basis Acrylate hybrid

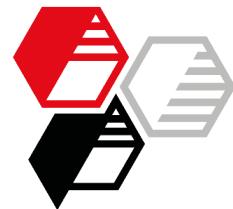
		Control	SILLITIN Z 86	SILLITIN Z 89	SILLITIN P 87	AKTISIL VM 56/89
Pigment preparation	L 00058.1	[1]	[5]	[6]	[7]	[9]
	-- part 1 --					
	Viacryl VSC 6292w/38WA	(1)	360	360	360	360
	-- part 2 --					
	Texanol	(2)	20	20	20	20
	Butyl glycol		6	6	6	6
	-- part 3 --					
	Demineralized water		285	220	220	220
	-- part 4 --					
	Surfynol 104, 1:1 in methoxypropanol	(3)	20	20	20	20
	-- part 5 --					
	Paliogen Red L 3910 HD	(4)	105	70	70	70
	Kronos 2190	(5)	75	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
	Demineralized water		117	117	117	117
	Total parts by weight		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
	Pigment preparation		125	125	125	125
	Total parts by weight		1000	1000	1000	1000

- Recommendation**
- SILLITIN Z 86**
 - good corrosion protection, best price-performance
 - SILLITIN Z 89**
 - high gloss, high color neutrality, high storage stability
 - SILLITIN P 87**
 - high gloss, high gloss consistency even on geometrically complex structures (L-effect)
 - AKTISIL VM 56/89**
 - 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
	Pigment-binder-ratio		0.20	0.27	0.27	0.27
Properties	Color d/8° L*		43.9	43.7	43.7	43.8
	Color d/8° a*		47.9	47.4	47.2	47.2
<u>Salt spray test DIN EN ISO 9227 NSS, 500 h</u>	Color d/8° b*		20.9	21.3	21.1	21.0
	Gloss 60°	GU	76	66	70	72
	Δ Gloss 60° between vertical and horizontal surfaces (L-effect)	GU	4	14	11	8
						13
<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		all: ≥ 50				
Pendulum hardness Koenig		all: > 160				
Cross-cut test 1 mm, after tape tear-off		all: 0				
Cupping test Erichsen		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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