

**Industrial coating****Anti-corrosion 2K epoxy primer, water-based, gray****Deutsche Bahn, high requirements to mechanical flexibility, adhesion and corrosion protection****Free of active anti-corrosion pigments or inhibitors, fast drying and sandability****Basis** Epoxy resin (solid epoxy resin and hydrophobic amine)

		Basis Allnex REC 19011 with talc and barite			
L 00040.3		[1]	[3]	[9]	
Component A	-- part 1 --				
	Demineralized water	11.94	11.94	11.94	
	Additol VXW 6208	(1)	3.52	3.52	3.52
	Additol VXW 6393	(1)	0.16	0.16	0.16
	Texanol	(2)	0.64	0.64	0.64
	-- part 2 --				
	Talc	9.06	---	---	
	Barite	24.62	13.00	13.00	
	AKTISIL AM	(3)	---	15.37	---
	SILLITIN V 85	(3)	---	---	15.37
	Kronos 2190	(4)	21.85	21.85	21.85
	Bayferrox 3920	(5)	0.43	0.43	0.43
	Bayferrox 306	(5)	1.17	1.17	1.17
	-- part 3 --				
	Additol VXW 6388	(1)	0.64	0.64	0.64
	Methoxypropanol		1.07	1.07	1.07
	-- part 4 --				
	Beckocure EH 2261w/41WA	(1)	24.90	24.90	24.90
	Total parts by weight		100.00	94.69	94.69
	Component B	Beckopox EP 387w/52WA	(1)	49.80	49.80

Recommended Base formulation with very good corrosion protection and outstanding substrate adhesion
 [3] additionally optimized storage stability and sedimentation stability
 [9] additionally optimized cupping for maximum mechanical flexibility

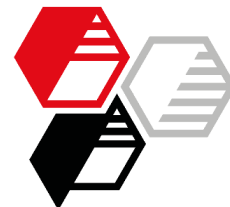


L 00040.3 [1] [3] [9]

Preparation	- mix raw materials from part 1
Komponente A	- stir in raw materials from part 2 in the indicated order and disperse by dissolver with toothed disc to a particle size of 20 µm
	- successively add the raw materials from parts 3 and 4 for completion
Application	- mix component A and B shortly before application
	- dilute with water to spray viscosity
	- air spray gun, 2 bar, nozzle 2 mm
	- dry film thickness: ≈ 95 µm, single- layer
Drying	- pendulum hardness, cross-cut test, cupping: 7 days @ standard climate 23/50; or as indicated
	- humidity test, cyclic corrosion test: 14 days @ standard climate 23/50
Suppliers	(1) Allnex
	(2) Eastman Chemical Company
	(3) HOFFMANN MINERAL
	(4) Kronos International
	(5) Lanxess

More information on this topic:

[Neuburg Siliceous Earth in water-based corrosion protection - 2C epoxy primer grey for trains](#)



Basis
with talc and
barite

L 00040.3

[1]

[3]

[9]

Technical Data

* = compliant according to Deutsche Bahn Standard DBS 918300, Anhang B, Blatt 2

DBS

Mixing ratio A : B		2.0 : 1	1.9 : 1	1.9 : 1	
Crosslinking ratio	%	49	49	49	
Solids content w/w	%	64.1	62.8	62.8	
Solids content v/v	%	47.2*	47.2*	47.2*	≥ 45
PVC	%	32.0	32.0	32.0	

Properties

Fineness of grind after 30 min with toothed disc @ 8 m/s	µm	10-15*	10-15*	15-20*	≤ 35
---	----	--------	--------	--------	------

Component A, storage 28 days @ 40 °C

Separation stability	poor	very good	good
Sedimentation stability	sediment	very good	very good

Dyn. viscosity A+B, @ 23 °C	0.1 s ⁻¹	Pa·s	57.8	75.5	97.3
	1000 s ⁻¹	Pa·s	0.46	0.48	0.48

Substrate: cold-rolled steel Q-Panel Type R-48

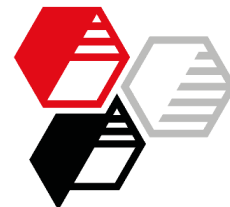
Cross-cut test 2 mm, tape tear-off	all: ≤ 1
+ 7 d @ 50 °C convection	all: ≤ 1

Substrate: slightly sanded deep drawing steel DC04

Pendulum hardness Koenig	s	46	49	43	
+ 7 d @ 50 °C convection	s	95	104	94	
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
+ 7 d @ 50 °C convection			all: ≤ 1		
Cupping test Erichsen	mm	2.9	3.6	5.4*	≥ 4
+ 7 d @ 50 °C convection	mm	1.5	3.4	4.6	

480 h Humidity test DIN EN ISO 6270-2

Degree of blistering	DIN EN ISO 4628-2	all: 0 (S0)
Degree of rusting	DIN EN ISO 4628-3	all: Ri 0
Degree of cracking	DIN EN ISO 4628-4	all: 0 (S0)
Degree of flaking	DIN EN ISO 4628-5	all: 0 (S0)
Cross-cut test 2 mm, tape tear-off, after 0 h		all: ≤ 1
Cross-cut test 2 mm, tape tear-off, after 24 h		all: ≤ 1



		Basis with talc and barite			
L 00040.3		[1]	[3]	[9]	
Substrate: blasted steel, preparation level Sa 2 ½, roughness „fine (G)“					DBS
Cross-cut test 2 mm, tape tear-off			all: ≤ 1*		≤ 1
+ 7 d @ 50 °C convection			all: ≤ 1*		≤ 1
Cupping test Erichsen	mm	2.3	2.8	4.2	
+ 7 d @ 50 °C convection	mm	1.3	2.2	3.3	
Sandability with eccentric sander			all: very good*		
a.) drying ≤ 16 h @ standard climate 23/50			sandable without heavy smearing and quick clogging of the sandpaper		
b.) 15 min flash-off + 2 h @ 40 °C convection					
480 h Humidity test DIN EN ISO 6270-2					
Degree of blistering	DIN EN ISO 4628-2		all: 0 (S0)*		0 (S0)
Degree of rusting	DIN EN ISO 4628-3		all: Ri 0		
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)		
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)		
Cross-cut test 2 mm, tape tear-off, after 0 h			all: ≤ 1		
Cross-cut test 2 mm, tape tear-off, after 24 h			all: ≤ 1*		≤ 1
same result also after 1000 h humidity test					
672 h Cyclic corrosion test = 4 cycles, DIN EN ISO 11997-1 cycle B					
<i>immediately after the last humidity phase:</i>					
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
Degree of blistering	DIN EN ISO 4628-2		all: 0 (S0)*		0 (S0)
<i>after 48 h storage @ standard climate = end of cycle (end of test)</i>					
Degree of rusting	DIN EN ISO 4628-3		all: Ri 0*		Ri 0
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)*		0 (S0)
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)*		0 (S0)
Delamination / corrosion at scribe					
Sikkens 1 mm	DIN EN ISO 4628-8		all: 1.7 mm*		≤ 2
Cross-cut test 2 mm, tape tear-off, after 0 h			all: ≤ 1*		≤ 1
1680 h Cyclic corrosion test = 10 cycles					
<i>immediately after the last humidity phase:</i>					
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
Degree of blistering	DIN EN ISO 4628-2		all: ≤ 2 (S2)		
<i>after 48 h storage @ standard climate = end of</i>					
Degree of rusting	DIN EN ISO 4628-3		all: at most punctual		
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)		
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)		
Delamination / corrosion at scribe					
Sikkens 1 mm	DIN EN ISO 4628-8		all: 3.2 mm		
Cross-cut test 2 mm, tape tear-off, after 0 h			all: ≤ 1		



		Basis with talc and barite			
L 00040.3		[1]	[3]	[9]	
Substrate: blasted aluminum Type AlMg2Mn0.8					DBS
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
+ 7 d @ 50 °C convection			al: ≤ 1		
Cupping test Erichsen	mm	1.4	1.5	2.8	
+ 7 d @ 50 °C convection	mm	1.1	1.3	2.1	
480 h Humidity test					
Degree of blistering	DIN EN ISO 4628-2		all: 0 (S0)*		0 (S0)
Degree of rusting	DIN EN ISO 4628-3		all: Ri 0		
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)		
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)		
Cross-cut test 2 mm, tape tear-off, after 0 h			all: ≤ 1		
Cross-cut test 2 mm, tape tear-off, after 24 h			all: ≤ 1*		≤ 1
same result also after 1000 h humidity test					
672 h Cyclic corrosion test = 4 cycles					
<i>immediately after the last humidity phase:</i>					
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
Degree of blistering	DIN EN ISO 4628-2		all: 0 (S0)*		0 (S0)
<i>after 48 h storage @ standard climate = end of</i>					
Degree of rusting	DIN EN ISO 4628-3		all: Ri 0*		Ri 0
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)*		0 (S0)
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)*		0 (S0)
Delamination / corrosion at scribe			all: none*		≤ 2
Sikkens 1 mm	DIN EN ISO 4628-8		all: ≤ 1*		≤ 1
Cross-cut test 2 mm, tape tear-off			all: ≤ 1*		≤ 1
1680 h Cyclic corrosion test = 10 cycles					
<i>immediately after the last humidity phase:</i>					
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		
Degree of blistering	DIN EN ISO 4628-2		all: ≤ 1 (S2)		
<i>after 48 h storage @ standard climate = end of</i>					
Degree of rusting	DIN EN ISO 4628-3		all: Ri 0		
Degree of cracking	DIN EN ISO 4628-4		all: 0 (S0)		
Degree of flaking	DIN EN ISO 4628-5		all: 0 (S0)		
Delamination / corrosion at scribe			all: none		
Sikkens 1 mm	DIN EN ISO 4628-8		all: ≤ 1		
Cross-cut test 2 mm, tape tear-off			all: ≤ 1		

Our applications engineering advice and the information contained in this formulation are based on experience and are made to the best of our knowledge and belief, they must be regarded however as non-binding advice without guarantee. Working and employment conditions over which we have no control exclude any damage claim arising from the use of our data and recommendations. Furthermore we cannot assume any responsibility for patent infringements, which might result from the use of our information.