

## Industrial coating **Anti-corrosion coating** very high solid, VOC approx. 145 g/l

Basis

Polyaspartic (polyaspartic ester and aliphatic isocyanate)

	R 24404.1		Α	В	С	
Component A	Desmophen NH 1520	(1)	15.4	15.4	17.8	
	Desmophen VP LS 2142 )*		4.8	4.8	5.6	
	UOP L-powder	(2)	2.1	2.1	2.4	
	Methoxy propyl acetate / Solvesso 100 (1:1)		8.8	8.8	10.2	
	Byk-085	(3)	0.7	0.7	0.8	
	Disperbyk-110	(3)	0.6	0.6		
	Tinuvin 292	(4)	0.4	0.4	0.5	
	Sachtleben R-KB-4	(5)	11.0	11.0	12.8	
	Heucophos ZPA	(6)	11.0	11.0	12.8	
	SILLITIN V 85	(7)	27.4			
	SILLITIN Z 86	(7)		27.4		
	AKTISIL PF 777	(7)			16.5	
Component B	Desmodur ultra N 3600	(1)	17.8	17.8	20.6	
	Total % by weight		100.0	100.0	100.0	
	)* Desmophen VP LS 2142 is no longer availa Recommended: CSTICOphen VPLS 2142	able (3)				
Recommendation	Formulation A with SILLITIN V 85: for strong ionic exposure on blasted or non-blasted steel, glossy coating					
	Formulation B with SILLITIN Z 86: for strong ionic exposure on blasted or non-blasted steel, matte coating					
	Formulation C with AKTISIL PF 777: for intense humid environment particularly on non- blasted steel					
Mixing	The preparation of component A was realized by dissolver with adapted bead mill after predispersion by grinding (20 min, 8 m/s).					
Application	Spraying by air pressure, single-layered with a dry film thickness of 120 $\mu\text{m}$					



# GUIDE FORMULATION || page 2 of 4



	R 24404.1			А	В	С
Technical Data	Solids content (m/m) PVC		% %	91 30	91 30	90 23
	VOC		g/l	141	141	148
Properties	Fineness of grind		μm	< 10	< 10	< 10
	Sedimentation comp. A. 28 d / 5	50°C		no	no	no
	Dynamic viscosity A+B 0.1 s <sup>-1</sup> , 2	23°C	Pa⋅s	1.9	13.9	39.3
	Dynamic viscosity A+B 1000 s <sup>-1</sup> , 2 Pot life (Brookfield, spindle 6, 20 rp	23°C om)	Pa∙s	0.68	0.86	0.37
	initial visc	osity	Pa⋅s	0.8	1.2	2.4
	afte	r 5 h	Pa⋅s	4.1	12	3.1
	Drying (DIN 53150, stage T4)		h	5-6	5-6	5-6
	Gloss 60°			90	11	14
	Color (D65 / d8 / 10°)	L*		92.9	92.4	93.7
		a*		-0.1	0.2	-0.2
		b*		7.3	9.0	6.6
	Hiding power: dry film thickness fo	r				
	contrast ratio = 98%		μm		86	93
	Pendulum hardness after 168 h		S	134	119	119
	Cross-cut test (3 mm after tape tea	ar-off)		1	1	0
	Abrasion loss		mg	152	176	

### Cold-rolled steel, Sa 2½, blasted medium (G) according to ISO 8503-1

Salt spray test DIN EN ISO 9227 NSS, 1000 h

Rating according to DIN EN ISO 4628 part 2	-5 and 8			
Degree of blistering		0	0	
Degree of rusting		0	0	
Degree of cracking		0	0	
Degree of flaking		0	0	
Degree of corrosion around a scribe	mm	1.8	1.8	
Degree of delamination around a scribe	mm	7	6	
Cross-cut test (3 mm after tape tear-off)		1	1	



# GUIDE FORMULATION || page 3 of 4



R 24404.1		А	В	С			
Humidity test DIN EN ISO 6270-2 CH 1000 h							
Rating according to DIN EN ISO 4628 part 2-5	and 8						
Degree of blistering		0	0				
Degree of rusting		0	0				
Degree of cracking		0	0				
Degree of flaking		0	0				
Degree of corrosion around a scribe	mm	0.2	0.5				
Degree of delamination around a scribe	mm	3.5	4.3				
Cross-cut test (3 mm after tape tear-off)		1	0-1				
Cold-rolled steel, non-blasted, Q-Panel R 48	3						
Salt spray test DIN EN ISO 9227 NSS, 480 h							
Rating according to DIN EN ISO 4628 part 2-5	and 8						
Degree of blistering				0			
Degree of rusting				0			
Degree of cracking				0			
Degree of flaking				0			
Degree of corrosion around a scribe mm				3.5			
Degree of delamination around a scribe	mm			13			
Cross-cut test (3 mm after tape tear-off)				0-1			
Humidity test DIN EN ISO 6270-2 CH, 480 h							
Rating according to DIN EN ISO 4628 part 2-5 and 8							
Degree of blistering				0			
Degree of rusting				0			
Degree of cracking				0			
Degree of flaking				0			
Degree of corrosion around a scribe mm				0.3			
Degree of delamination around a scribe mm				7			
Cross-cut test (3 mm after tape tear-off)				2			



## GUIDE FORMULATION || page 4 of 4



В

A

С

#### **Suppliers**

- (1) Covestro UOP
- (2)
- Byk Chemie (3)
- (4) BASF
- Venator Materials Corporation (5)
- (6) Heubach
- HOFFMANN MINERAL (7)
- (8) **CSC** Jäklechemie

### More information on this topic

Neuburg Siliceous Earth in 2C-Polyaspartic Coatings for Corrosions Protection

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