# GUIDE FORMULATION || page 1 of 3



## **Industrial coating Anti-corrosion primer** medium solid, VOC approx. 430 g/l

**Basis** Epoxy resin (bisphenol A and polyamide resin)

	R 24301.1	[25]	[27]	[42]
Component A	Epikote Resin 1001-X-75 (1	1) 23.8	23.8	23.8
	Bentone 34 10 % paste )* )** (2	2) 4.3	4.3	4.3
	Xylene	6.5	6.5	6.5
	Ethyl glycol	4.7	4.7	4.7
	Methyl isobutyl ketone (MIBK)	6.6	6.6	6.6
	Nusa 57 (3	3) 0.4	0.4	0.4
	Byk-354 (4	1) 0.8	0.8	0.8
	Sachtleben RD3 (5	5) 5.9	5.9	5.9
	Blanc Fixe micro (5	5) 7.8	7.8	7.8
	Zinkphosphat ZP 10 (6	3) 2.5	2.5	2.5
	AKTISIL PF 777 (7	7) 21.3		
	AKTISIL AM (7	7)	21.3	21.3
Component B	Versamid 115 X 70 (8	3) 12.7	12.7	12.7
	Dynasylan AMEO (9	9)		< 1.0
	Total parts by weight	97.3	97.3	98.3

10 % Bentone paste:

Bentone 34 10 **Xylene** 87 Ethanol

with AKTISIL PF 777, the Bentone portion can be lowered or left off

#### Recommendation

Formulation [25] with AKTISIL PF 777: preferably for blasted steel, high corrosion protection at scribe, early hardness development, high sag resistance

Formulation [27] with AKTISIL AM: preferably for blasted steel, good leveling

Formulation [42] with AKTISIL AM: preferably for non-blasted steel, excellent adhesion,

reduced delamination around a scribe

Mixing The preparation of component A was realized by dissolver with adapted bead mill after

predispersion by grinding (15 min, 8 m/s).

**Application** Spraying by air pressure, single-layered with a dry film thickness of 80 µm



# GUIDE FORMULATION || page 2 of 3



	R 24301.1		[25]	[27]	[42]	
Technical Data	Solids content (m/m) PVC VOC	% % g/l	67 34 430	67 34 430	67 34 425	
Properties	Fineness of grind Sedimentation comp. A. 60 d / 23°C Dynamic viscosity A+B 0.1 s <sup>-1</sup> , 23°C Dynamic viscosity A+B 1000 s <sup>-1</sup> , 23°C Pendulum hardness after 48 h after 336 h Cross-cut test (2 mm after tape tear-off)	μm Pa⋅s Pa⋅s s	5 no 49.8 0.29 70 119	5 no 3.8 0.32 48 113	5 no 6.6 0.29 35 88 0	
	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		1 (S2)	0		
	Degree of rusting		0	0		
	Degree of cracking		0	0		
	Degree of flaking		0	0		
	Degree of corrosion around a scribe	mm	0.1	0.4		
	Degree of delamination around a scribe	mm	12	15		
	Cross-cut test (2 mm after tape tear-off)		0	0		
	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	< 0.5	< 0.5		
	Degree of delamination around a scribe	mm	0	0		
	Cross-cut test (2 mm after tape tear-off)		0	0		



## GUIDE FORMULATION || page 3 of 3



R 24301.1		[25]	[27]	[42]			
Cold-rolled steel, non-blasted, Q-Panel R 48							
Salt spray test DIN EN ISO 9227 NSS, 1000 h							
Rating according to DIN EN ISO 4628 part 2-5 a							
Degree of blistering			0-1 (S2-3)				
Degree of rusting			0				
Degree of cracking			0				
Degree of flaking				0			
Degree of corrosion around a scribe	mm			1.3			
Degree of delamination around a scribe	mm			8			
Cross-cut test (2 mm after tape tear-off)				0			
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			
Degree of rusting				0			
Degree of cracking				0			
Degree of flaking				0			
Degree of corrosion around a scribe mm				< 0.5			
Degree of delamination around a scribe mm				0.8			
Cross-cut test (2 mm after tape tear-off)				0			

### **Suppliers**

- (1) Westlake
- (2) Elementis
- (3) Nusa Iberica
- (4) Byk Chemie
- (5) Venator Materials Corporation
- (6) Heubach
- (7) HOFFMANN MINERAL
- (8) BASF
- (9) Evonik Industries

### More information on this topic:

Neuburg Siliceous Earth for Medium Solid Epoxy Coatings

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.

