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**Industrial coating****Anti-corrosion primer for high requirements****very high solid, VOC 250 g/l, good acid resistance****for non-sagging thick film applications**

Basis: Epoxy resin (bisphenol A + bisphenol A/F and polyamidoamine adduct)

			R 24403 D
<b>Component A</b>	Araldite GZ 7071 X 75	(1)	130.87
	Araldite GY 783	(1)	98.15
	Luvotix P 25 X	(2)	1.00
	n-Butanol		40.00
	Byk-057	(3)	3.50
	Zinkphosphat ZP 10	(4)	53.90
	Bayferrox 222	(5)	35.90
	AKTISIL PF 777	(6)	212.33
<b>Component B</b>	Shellsol A 100	(7)	39.10
	Aradur 450	(1)	81.20
	Total parts by weight		695.95
<b>Preparation</b>	The preparation of component A was realized by dissolver with adapted bead mill after predispersion by grinding (20 min, 7.8 m/s). Before adding pigment and filler, the liquid parts of component A are premixed for 5 min (using a part of the grinding beads). For activating Luvotix, the temperature of the mill base should exceed 55°C.		
<b>Application</b>	spraying by air pressure, single-layered with a dry film thickness of 250 µm on cold-rolled steel (Sa 2½, sandblasted medium (G) according to ISO 8503-1)		
<b>Technical Data</b>	Solids content (m/m)	%	85
	PVC	%	29
	VOC	g/l	250

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		Control with talc and barite	R 24403 D with AKTISIL PF 777		
<b>Properties</b>	Fineness of grind	µm	20	15	
	Sedimentation component A	28 d, 50°C	<i>a lot of, hard</i>	none	
	Dynamic viscosity A+B	0.1 s <sup>-1</sup> , 23°C	Pa·s	10.2	173
	Dynamic viscosity A+B	1000 s <sup>-1</sup> , 23°C	Pa·s	2.4	1.5
	Pot life (viscosity doubled)		min	50	160
	Pendulum hardness after 336 h		s	76	93
	Cross-cut test (3 mm after tape tear-off)			0	0-1
	Abrasion loss (DIN 53 754: S 42, 5.4 N, 100 rev.)		mg	253	156
	<b>Salt spray test DIN EN ISO 9227 NSS, 4000 h</b>				
	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	< 0.3	< 0.3	
	Degree of delamination around a scribe	mm	34	22	
	Cross-cut test (3 mm after tape tear-off)		0-1	1	
<b>Humidity test DIN EN ISO 6270-2 CH, 2000 h</b>					
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	0.4	0.0	
	Degree of delamination around a scribe	mm	<i>not evaluated</i>	not evaluated	
	Cross-cut test (3 mm after tape tear-off)		0-1	1	
<b>Chemical resistance DIN EN ISO 2812-1</b>					
Rating according to DIN EN ISO 4628 part 2					
	10 % sulfuric acid, 23°C	1000 h	5 (S5)	0	
	10 % acetic acid, 23°C	168 h	3-4 (S4)	3 (S2) 30 %*	
* To improve the resistance to organic acids, a cycloaliphatic hardener based on IPD is recommended, whereby results comparable to aromatic amine hardeners can be attained:					
	10 % acetic acid, 23°C	168 h	0	0	
		760 h	4 (S4)	0	

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<b>Suppliers</b>	(1) Huntsman Advanced Materials
	(2) Lehmann & Voss
	(3) Byk Chemie
	(4) Heubach
	(5) Lanxess
	(6) HOFFMANN MINERAL
	(7) Shell Chemicals

**More information on this topic is available in this technical report:**

[Neuburg Siliceous Earth in High Solid Epoxy Coatings](#)

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