

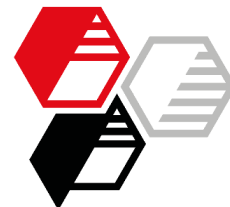
2K-PU coating for e. g. pipelines
heavy-duty
80 Shore D

Polyol Trifunctional polypropylene polyether polyol and
polyfunctional amine-based polyether polyol

Isocyanate Polyisocyanate prepolymer based on MDI

			SILLITIN Z 86 PURISS	SILFIT Z 91	AKTIFIT PF 115
	L00015.2		[3]	[7]	[10]
Component A	Desmophen 1400 BT	(1)	13.14	13.14	13.14
	Desmophen T 460	(1)	13.14	13.14	13.14
	Barite	(2)	8.87	8.87	8.87
	SILLITIN Z 86 PURISS	(3)	13.03	---	---
	SILFIT Z 91	(3)	---	13.03	---
	AKTIFIT PF 115	(3)	---	---	13.03
	Finma-Sorb 430 PR	(4)	5.21	5.21	5.21
	Ethacure 100 Plus	(5)	1.26	1.26	1.26
	Byk-A 530	(6)	0.26	0.26	0.26
	Disperbyk 163	(6)	0.26	0.26	0.26
	Dabco 33-LV	(7)	0.24	0.24	0.24
	Total parts by weight component A		55.41	55.41	55.41
Component B	Desmodur E 29	(1)	44.00	44.00	44.00
	Total parts by weight component A+B		99.41	99.41	99.41
Mixing ratio					
Component A:B by volume				1:1	
Stoichiometric, isocyanate / polyol				approx. 1.25	

Recommendation	[3]	SILLITIN Z 86 PURISS	- cost-effective standard product - balanced profile of properties
	[7]	SILFIT Z 91	- highest brightness and color neutrality - higher tensile strain /deformability
	[10]	AKTIFIT PF 115	- highest brightness and color neutrality - very low moisture content without increase under humid climatic conditions - higher tensile strain /deformability - higher impact strength - moderate rheological activity / higher sagging resistance - no sedimentation



Mixing Component A was prepared with a planetary dissolver under vacuum ("Labotop", equipped with toothed disk, bar blade and scraper).

Note Usually, the formulation is applied with a 2K airless system in a layer thickness of 1-2 mm. The processing time is <120 s at room temperature. To determine the mechanical properties, the formulations were applied at room temperature by hand into corresponding specimen molds using a 2K static mixer. The tests were carried out after a total curing time of 14 to 16 days at standard climatic conditions.

			SILLITIN Z 86 PURISS	SILFIT Z 91	AKTIFIT PF 115	
L00015.2			[3]	[7]	[10]	
Technical Data	Viscosity component A					
	@ 0.1 s ⁻¹	Pa·s	6.4	10.7	35.9	
	@ 1000 s ⁻¹	Pa·s	5.1	5.8	5.4	
	Storage stability component A after 3 months @ 40					
	Clear supernatant	%	6	8	9	
	Hard sediment	%	3	5	0	
	Hardness	DIN EN ISO 868; 15 s	Shore D	81	80	81
	Tensile modulus	DIN EN ISO 527; 0.5 mm/min	MPa	3560	3560	3380
	Tensile strength	DIN EN ISO 527; 5 mm/min	MPa	53.2	53.4	52.0
	Strain at break	DIN EN ISO 527; 5 mm/min	%	5.4	7.0	7.0
	Impact Strength Charpy	DIN EN ISO 179-1; 1eU	kJ/m²	20	23	31

Suppliers

- (1) Covestro
- (2) Sachtleben Minerals
- (3) HOFFMANN MINERAL
- (4) Finma-Chemie
- (5) Albemarle
- (6) Byk Chemie
- (7) Evonik Industries

More information on this topic:

[Neuburg Siliceous Earth in 2K PU Coatings for Pipelines](#)

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