

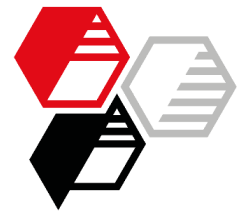


**Adhesive based on MS Polymer™, high strength  
75 Shore A**

**Basis** silane-terminated polyether

		SILFIT Z 91	AKTIFIT VM	AKTIFIT AM	AKTIFIT PF 115	AKTIFIT AM variation silane
V 44428.1		[4]	[5]	[7]	[8]	[9]
Kaneka Silyl™ SAX750	(1)	42.0	42.0	42.0	42.0	42.0
CAB-O-SIL TS-720	(2)	1.0	1.0	1.0	1.0	1.0
SILFIT Z 91	(3)	52.7	---	---	---	---
AKTIFIT VM	(3)	---	52.7	---	---	---
AKTIFIT AM	(3)	---	---	52.7	---	52.7
AKTIFIT PF 115	(3)	---	---	---	52.7	---
Dynasylan VTMO	(4)	2.3	2.3	2.3	2.3	2.3
Dynasylan AMMO	(4)	1.5	1.5	1.5	1.5	---
Dynasylan 1146	(4)	---	---	---	---	1.5
Dynasylan AMEO	(4)	---	---	---	---	1.5
Neostann S1	(1)	1.5	1.5	1.5	1.5	1.5
<b>Total parts by weight</b>		<b>101.0</b>	<b>101.0</b>	<b>101.0</b>	<b>101.0</b>	<b>102.5</b>

<b>Recommendation</b>	[4]	SILFIT Z 91	- low moisture content of the filler - cost effective - good mechanical properties
	[5]	AKTIFIT VM	- very low moisture content of the filler and nearly no moisture absorption at damp conditions - especially for thick joints in wood and metal
	[7]	AKTIFIT AM	- low moisture content of the filler - low and thereby adjustable viscosity - especially for thin joints in wood
	[8]	AKTIFIT PF 115	- very low moisture content of the filler and nearly no moisture absorption at damp conditions - low and thereby adjustable viscosity - for highest requirements on thin joints in wood
	[9]	variation silane	- optimized lap shear strength on wood with the combination of AKTIFIT AM and varied/increased adhesion promoter



			SILFIT Z 91	AKTIFIT VM	AKTIFIT AM	AKTIFIT PF 115	AKTIFIT AM variation silane	
			[4]	[5]	[7]	[8]	[9]	
V 44428.1								
<b>Properties</b>	Complex viscosity	DIN 54458						
	@ 50 % deformation		Pa·s	164	165	114	107	110
	@ 0.1 % deformation		Pa·s	248	241	210	219	175
	Skin formation		min	5	5	5	5	5
	In-depth cure after 8 h		mm	1.3	1.3	1.3	1.3	1.3
	In-depth cure after 24 h		mm	2.2	2.2	2.2	2.2	2.2
	Hardness	DIN ISO 7619-1	Shore A	74	75	74	75	76
	Tensile strength	DIN 53504, S2	MPa	10.0	10.7	9.8	8.9	10.4
	Elongation at break	DIN 53504, S2	%	136	148	161	156	155
	Lap shear strength	DIN EN 204/205						
	beech/beech, 0.1 mm, 7 d		MPa	6.0	6.1	6.5	7.2	8.1
	beech/beech, 1 mm, 28 d		MPa	3.4	4.2	3.6	4.6	5.5
	Lap shear strength	DIN EN 1465						
	aluminum/aluminum, 1 mm, 28 d		MPa	5.1	5.6	5.2	4.9	5.5

### Mixing

For the preparation a vacuum mixer equipped with dissolver disc, kneading tool and side scraper is suitable.

- charge polymer
- add rheological additive and filler (not pre-dried) while stirring
- disperse 10 min at 3000 rpm and 500 rpm under vacuum
- disperse 20 min at 1500 rpm and 300 rpm under vacuum
- cool down to 50°C
- add vinyl silane, stir in 5 min at 1000 rpm and 200 rpm
- add amino silane(s), stir in 5 min at 1000 rpm and 200 rpm
- add catalyst, stir in 5 min at 1000 rpm and 200 rpm
- deaerate 5 min at 500 rpm and 150 rpm under vacuum
- fill the compound into a cartridge

### Suppliers

- (1) Kaneka
- (2) Cabot
- (3) HOFFMANN MINERAL
- (4) Evonik Industries

### More information on this topic:

[Calcined Neuburg Siliceous Earth in Adhesives with High Strength Based on Kaneka MS Polymer](#)

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