



**Economic parquet adhesive
meets the requirements of DIN EN 14293 for “soft” adhesives
45 Shore A**

Basis silane-terminated polyether

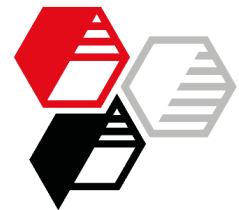
		SILLITIN V 85	SILLITIN Z 86 PURISS	SILFIT Z 91
V44303.2		[9]	[10]	[11]
Geniosil STP-E 10	(1)	15.5	15.5	15.5
Caradol ED 56-200	(2)	25.0	25.0	25.0
Geniosil XL 10	(1)	2.0	2.0	2.0
HDK H 18	(1)	2.5	2.5	2.5
SILLITIN V 85	(3)	47.0	---	---
SILLITIN Z 86 PURISS	(3)	---	47.0	---
SILFIT Z 91	(3)	---	---	47.0
Geniosil GF 96	(1)	1.0	1.0	1.0
Total parts by weight		93.0	93.0	93.0

Recommendation	[9]	SILLITIN V 85	very cost-effective low viscosity
	[10]	SILLITIN Z 86 PURISS	high strength
	[11]	SILFIT Z 91	low moisture content white and color-neutral low viscosity

Note The sagging behavior of the formulation can be adjusted by the rheological additive.

Further cost savings are possible (without compromising strength) by increasing the filler content up to 54 parts by weight.

Suppliers	(1)	Wacker Chemie
	(2)	Shell Chemicals
	(3)	HOFFMANN MINERAL



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Mixing

For the preparation a planetary mixer equipped with two kneading tools and scraper is suitable.

The formulation is prepared at room temperature in typically 10-15 min.

- charge polymer Geniosil STP-E 10, plasticizer Caradol ED 56-200 and drying agent Geniosil XL 10
- add rheological additive HDK H 18 while stirring
- add filler (not pre-dried) while stirring
- disperse 2 min at 600 rpm
- add adhesion promoter Geniosil GF 96
- disperse 1 min at 600 rpm under vacuum
- remove compound from the stirrer
- disperse 1 min at 600 rpm under vacuum
- degas 1 min at 200 rpm under vacuum
- fill into a cartridge

Properties

Complex viscosity	DIN 54458				
@ 50 % deformation		Pa·s	38	48	31
@ 0.1 % deformation		Pa·s	63	69	42
Hardness	DIN ISO 7619-1	Shore A	44	45	50
Tensile strength	DIN 53504, S2	MPa	2.7	3.7	3.2
Elongation at break	DIN 53504, S2	%	159	173	156

Lap shear test, DIN EN 14293, substrate: oak

1 mm adhesive layer – „soft“ parquet adhesive

required: lap shear strength > 0.5 MPa, displacement > 2 (@ 1 mm adhesive layer)

Lap shear strength		MPa	2.5	2.7	2.5
Displacement		mm	3.0	3.0	2.7
Adhesion (visual assessment)			+	+	+

More information on this topic:

[Neuburg Siliceous Earth in adhesives based on silane terminated polyether \(STP-E\), e. g. for parquet and industry](#)

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