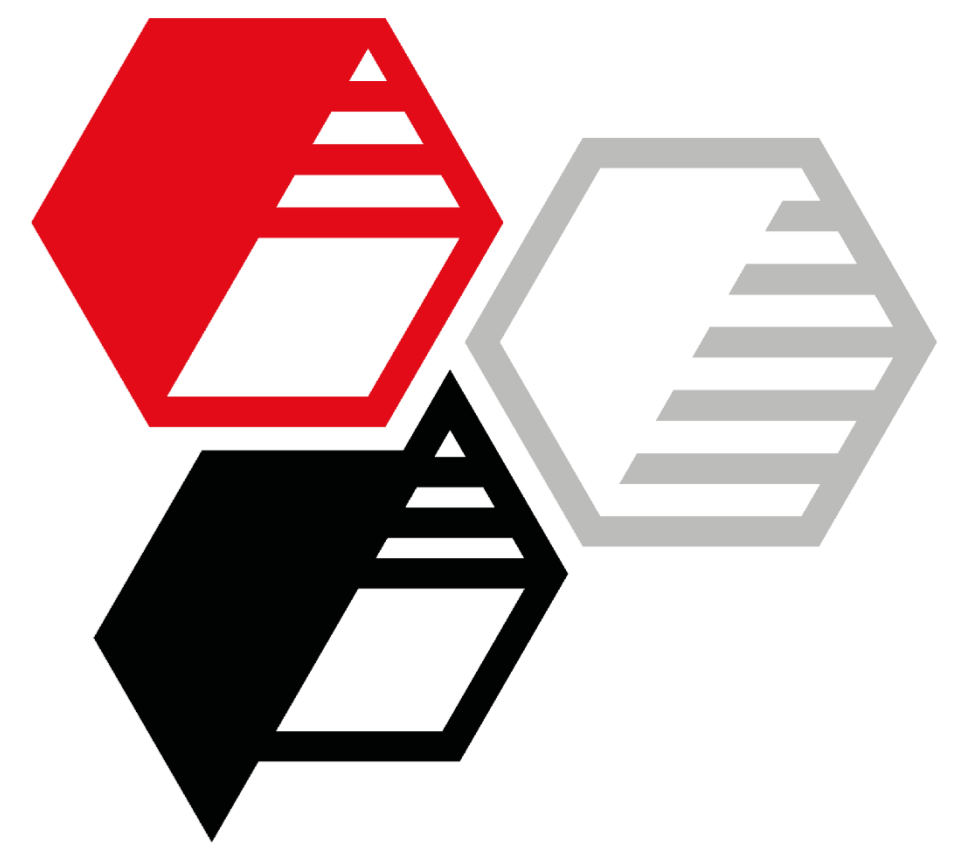
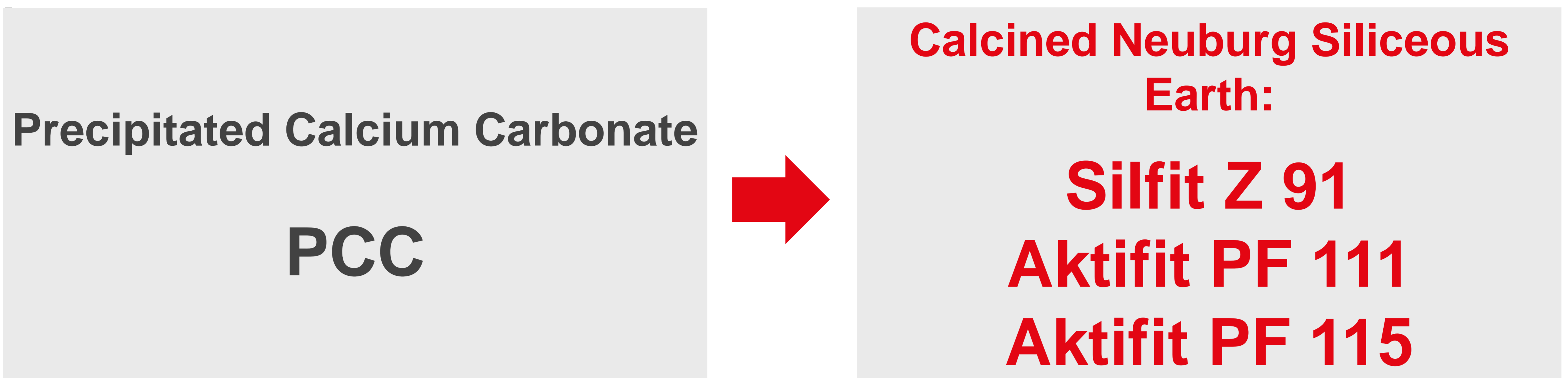


Calcined Neuburg Siliceous Earth in adhesives based on silane-terminated polyurethanes (STP-U)



Objective

Improvement of strength and rheology vs. calcium carbonate



Formulation

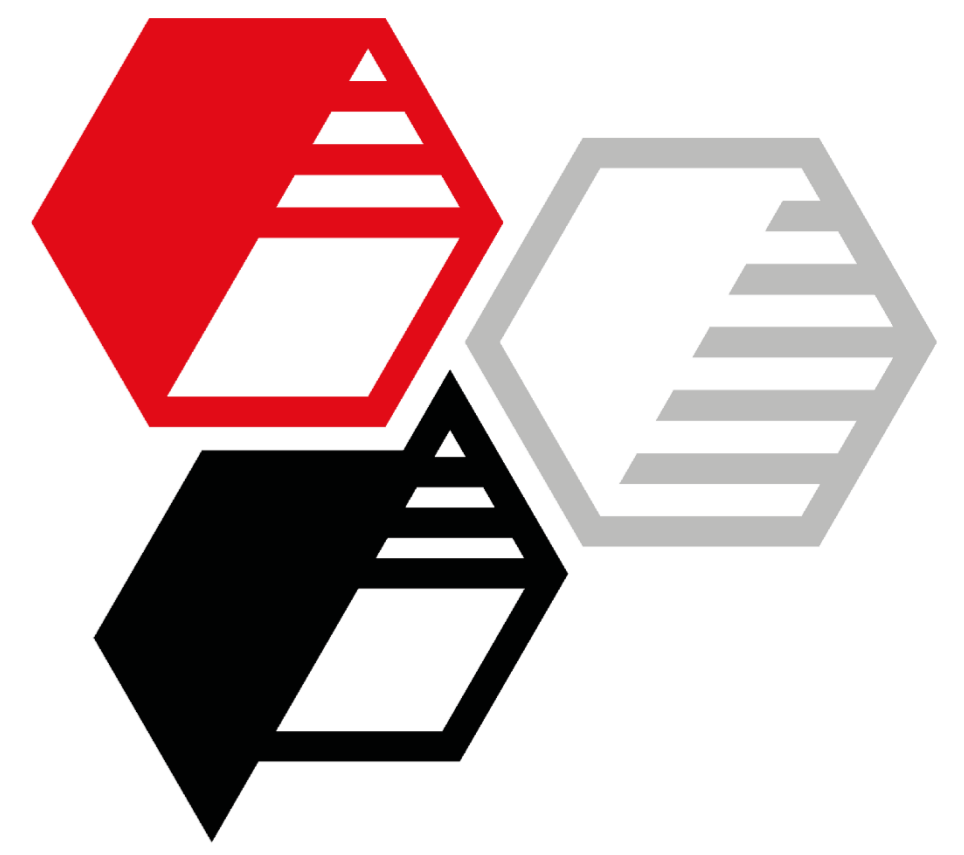
		% by weight
Desmoseal S XP 2821	Polymer: silane terminated polyurethane	38.88
Irganox 1135	Antioxidant	0.46
Bayferrox 415	Yellow pigment	0.28
Cab-O-Sil TS 720	Rheological additive: fumed silica	0.95
Filler		53.71
Dynasylan VTMO	Drying agent: vinyl silane	2.61
DBU	Catalyst	0.11
Dynasylan 1146	Adhesion promoter: amino silane	1.50
Dynasylan AMEO	Adhesion promoter: amino silane	1.50
Total		100.00

Filler recommendation

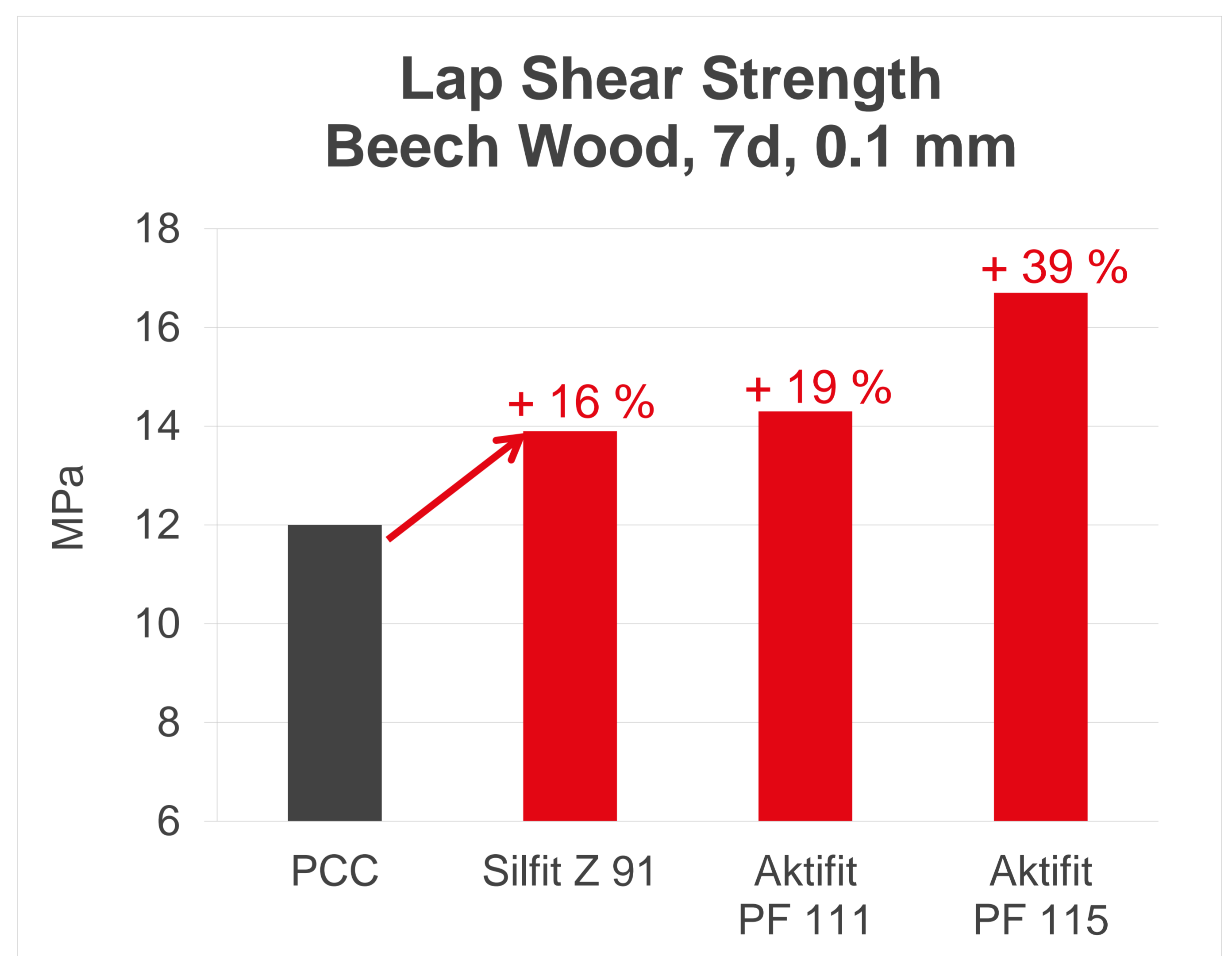
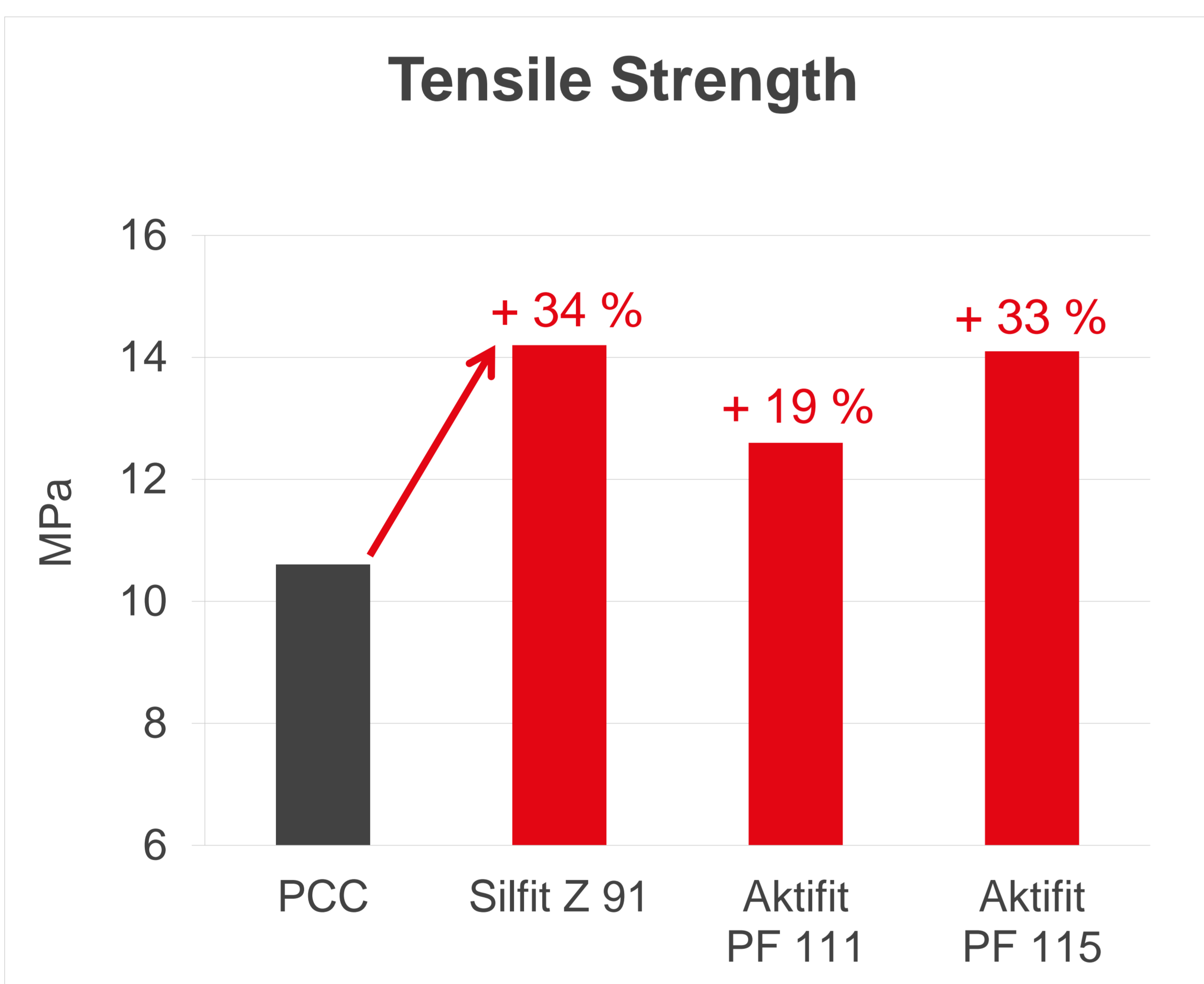
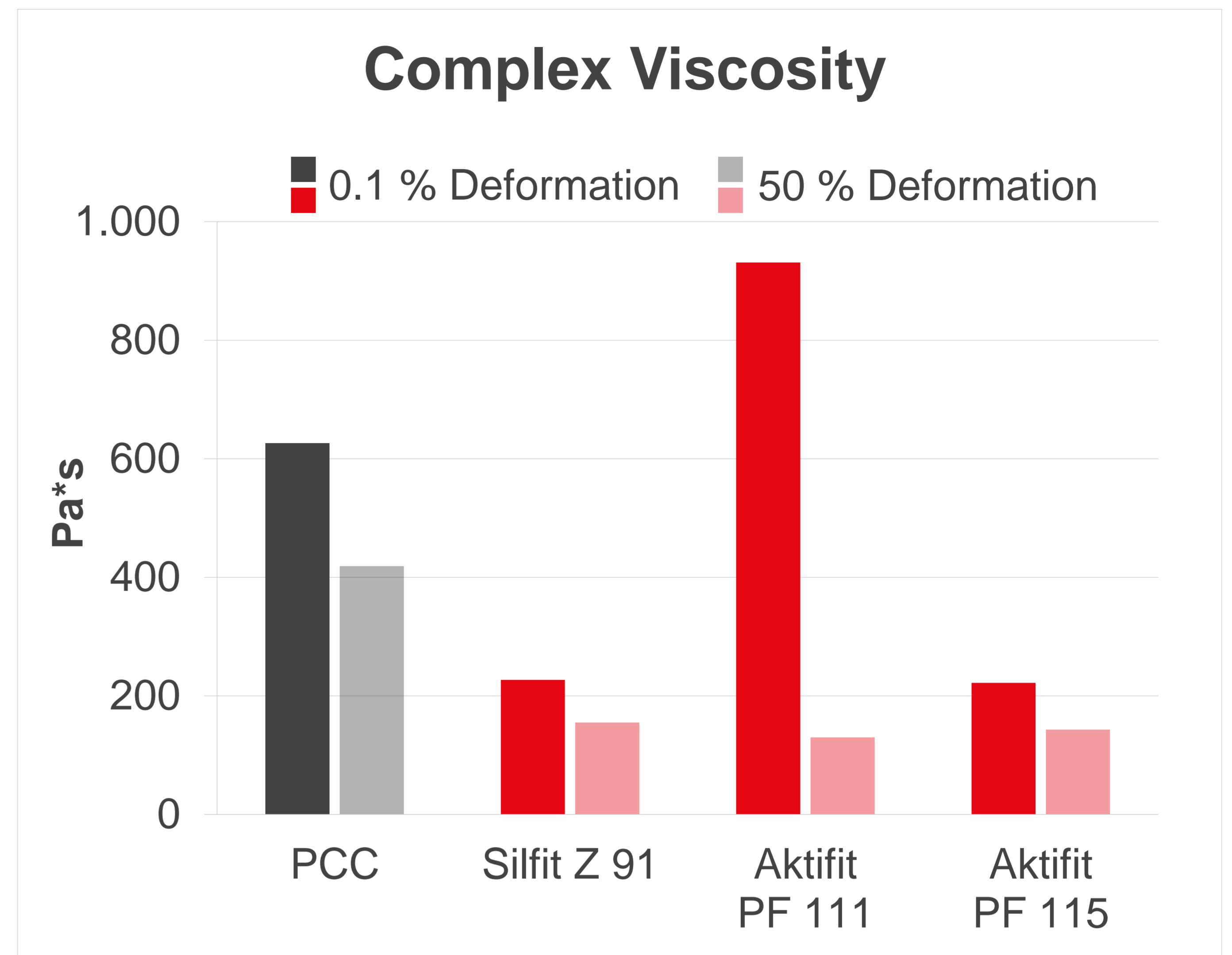
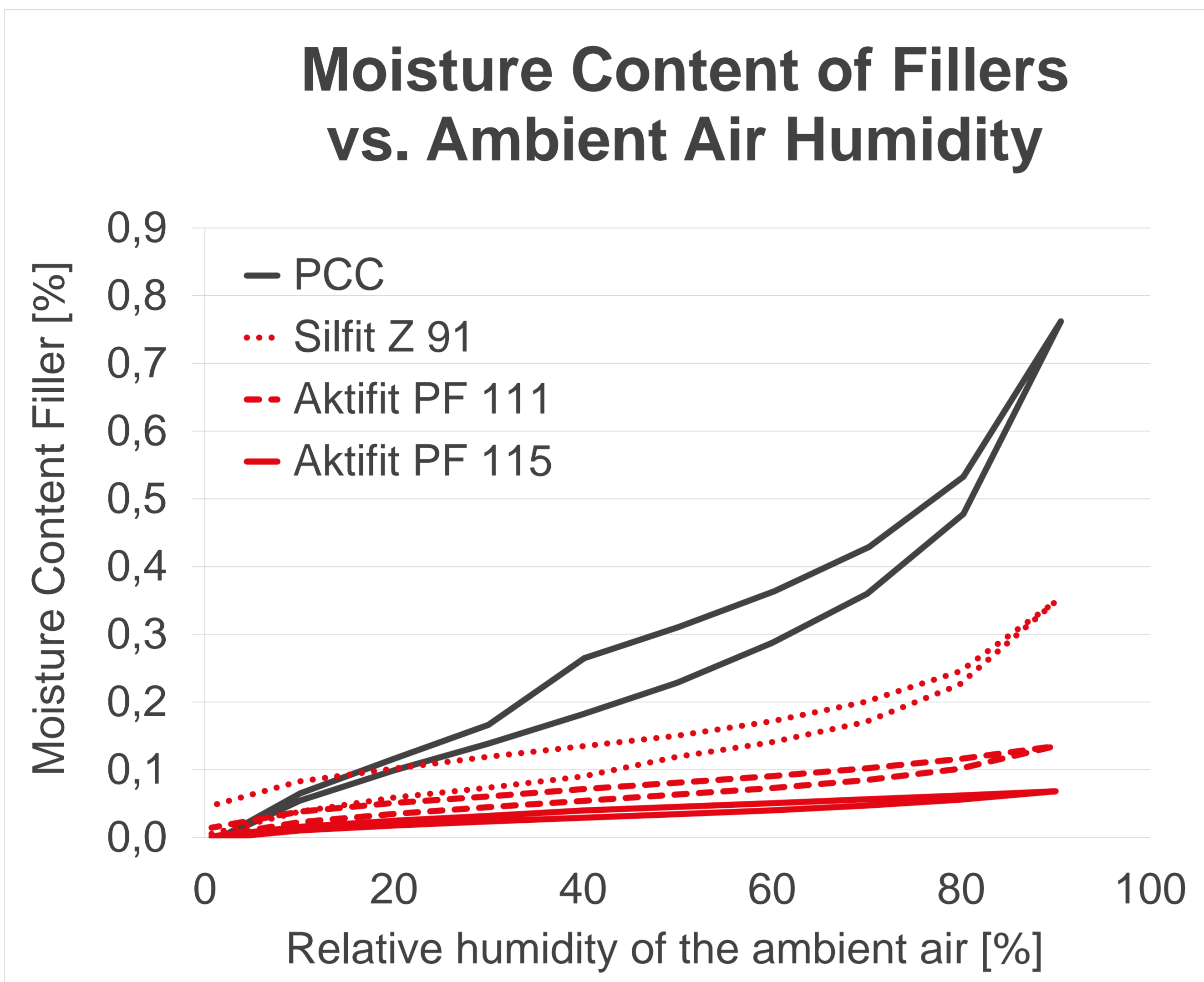
<p>Silfit Z 91</p> <p>cost effective good mechanical properties</p>	<p>Aktifit PF 111</p> <p>very low and constant moisture rheology control high strength, elongation at break and tear resistance</p>	<p>Aktifit PF 115</p> <p>very low and constant moisture for highest requirements on lap shear strength</p>
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Basis: Guide formulation BBB 7507 by Covestro

Calcined Neuburg Siliceous Earth in adhesives based on silane-terminated polyurethanes (STP-U)



Results



Summary

Benefits of **Neuburg siliceous earth** compared to precipitated calcium carbonate:

- ✓ Very low moisture content and very low moisture absorption even under humid conditions (especially with Aktifit PF 111 and Aktifit PF 115)
- ✓ Significant lower viscosity at higher deformation, thereby easier application
- ✓ Viscosity at low deformation / yield point variably adjustable
- ✓ Potential for reducing rheological additive fumed silica
- ✓ High hardness
- ✓ Increased tensile strength of up to 14 MPa
- ✓ Marked increase of lap shear strength, more than 16 MPa are possible