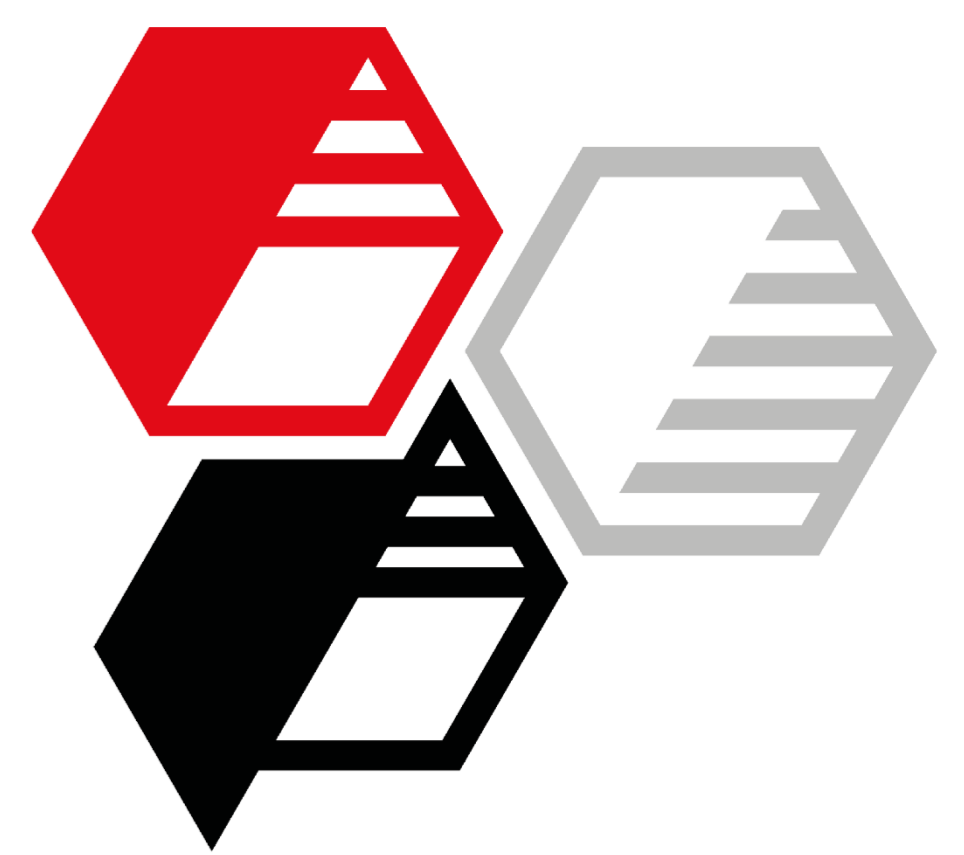
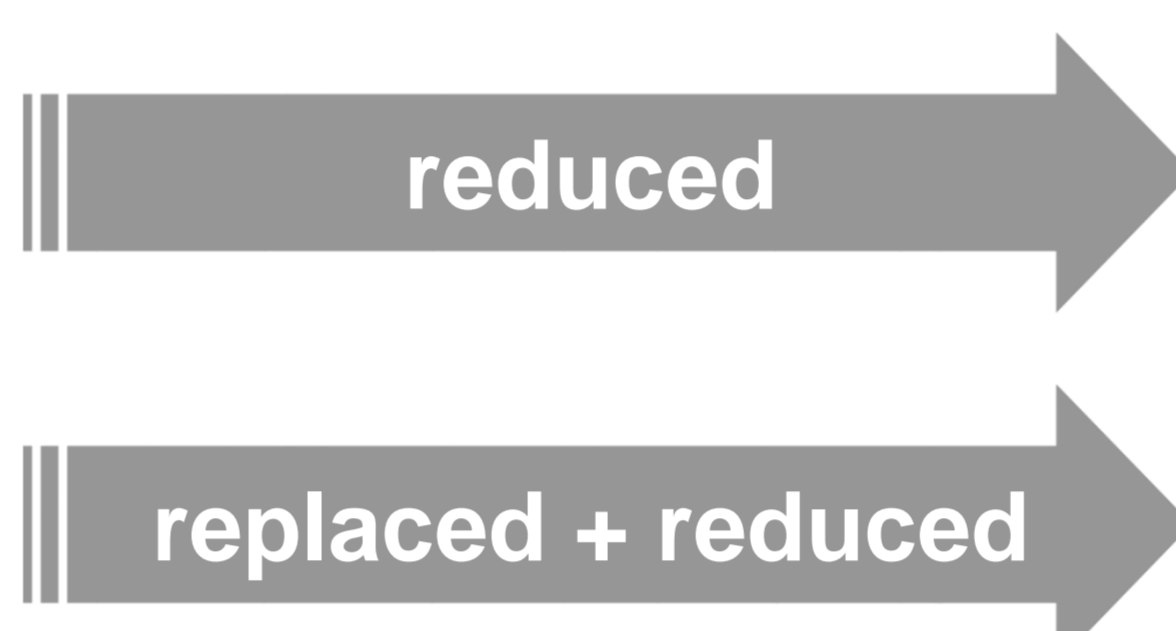


Neuburg Siliceous Earth vs. calcium carbonate silane-terminated polyether polymer high strength e. g. parquet adhesive



Formulation

Control Formulation with GCC		pbw or % by weight	Neuburg Siliceous Earth	
			pbw	% by weight
GENIOSIL® STP-E 10 Silane-terminated polyether	Polymer	25.5	25.5	27.6
Caradol ED 56-200 Polypropylene glycol	Plasticizer	15.0	15.0	16.2
GENIOSIL® XL 10 Vinyl silane	Drying agent	2.0	2.0	2.2
HDK H 18 Fumed silica	Rheological Additive	2.5	2.0	2.2
GCC (d ₅₀ = 5 µm) Ground calcium carbonate	Filler	54.0	47.0	50.7
GENIOSIL® GF 96 Amino silane	Adhesion promoter	1.0	1.0	1.1
Total		100.0	92.5	100.0



Filler recommendation

- very cost-effective
- high strength

Sillitin V 85

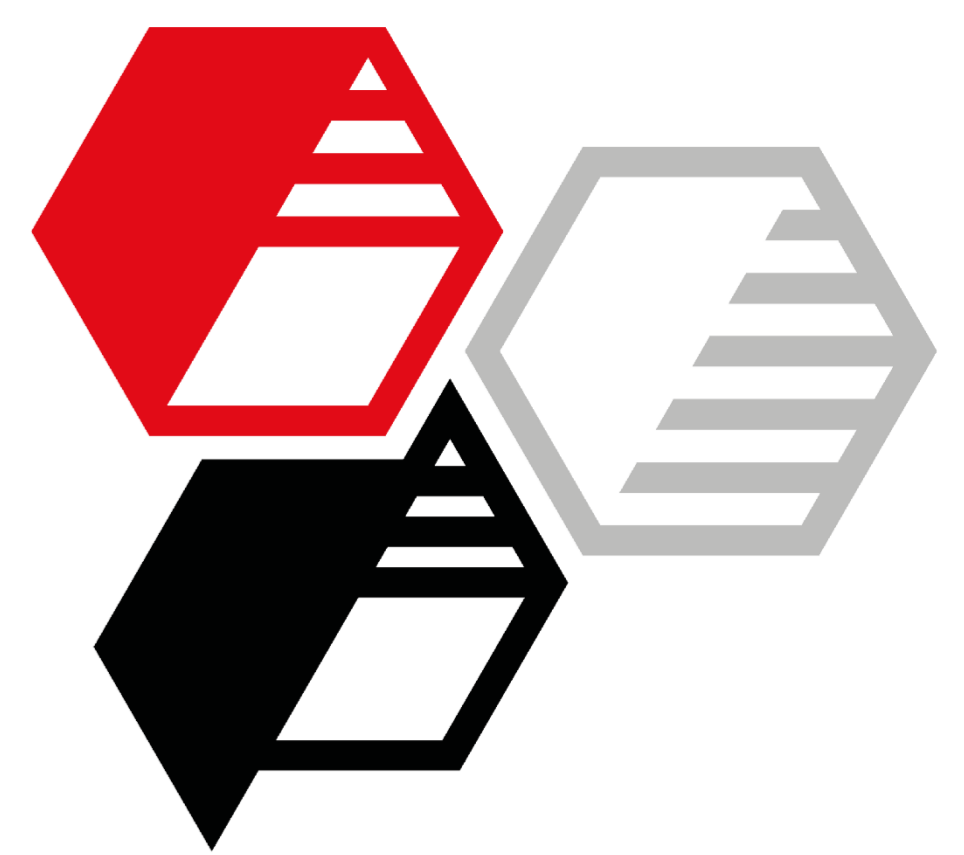
- low moisture content
- white and color-neutral
- cost-effective
- very high strength

Silfit Z 91

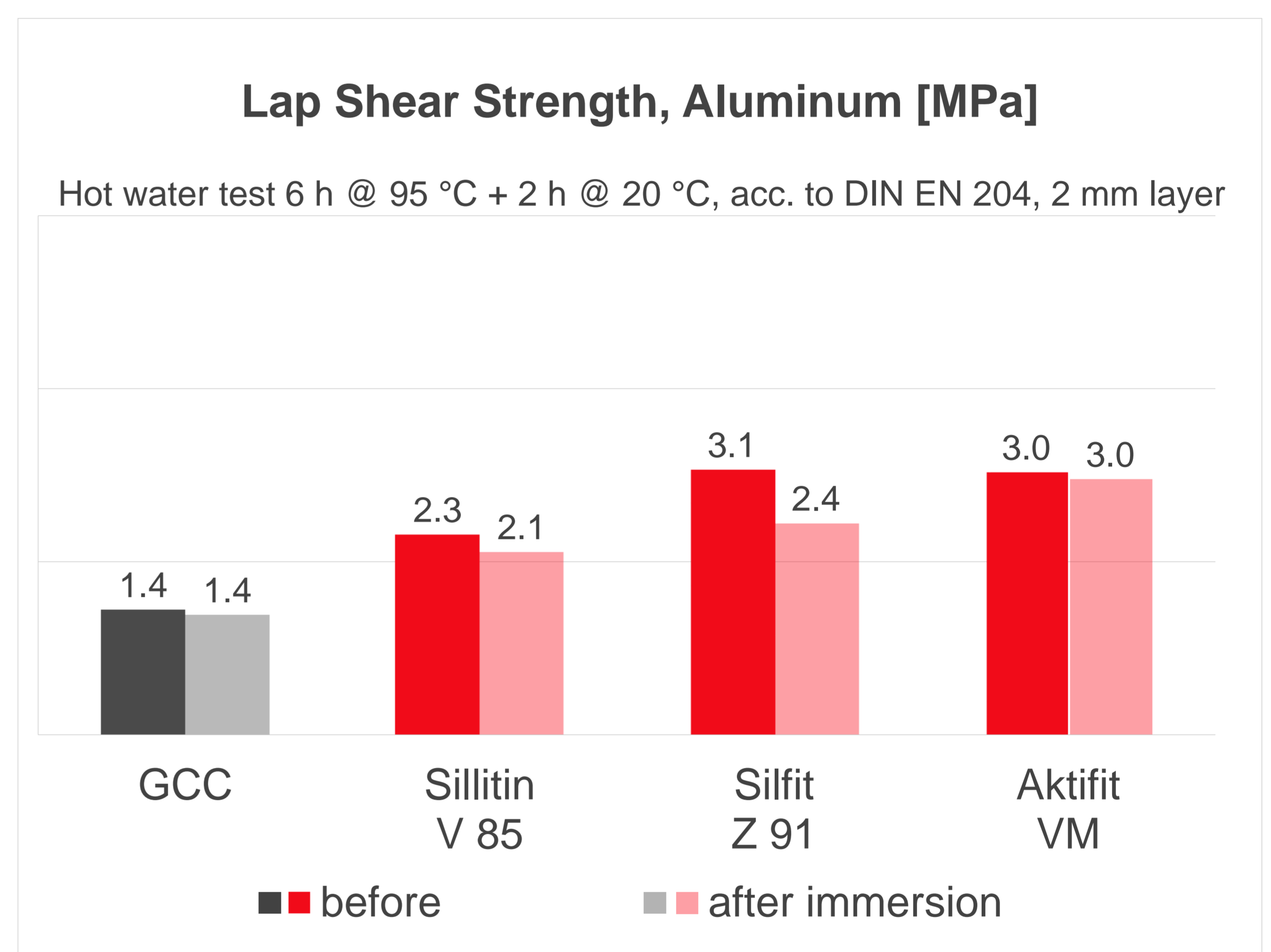
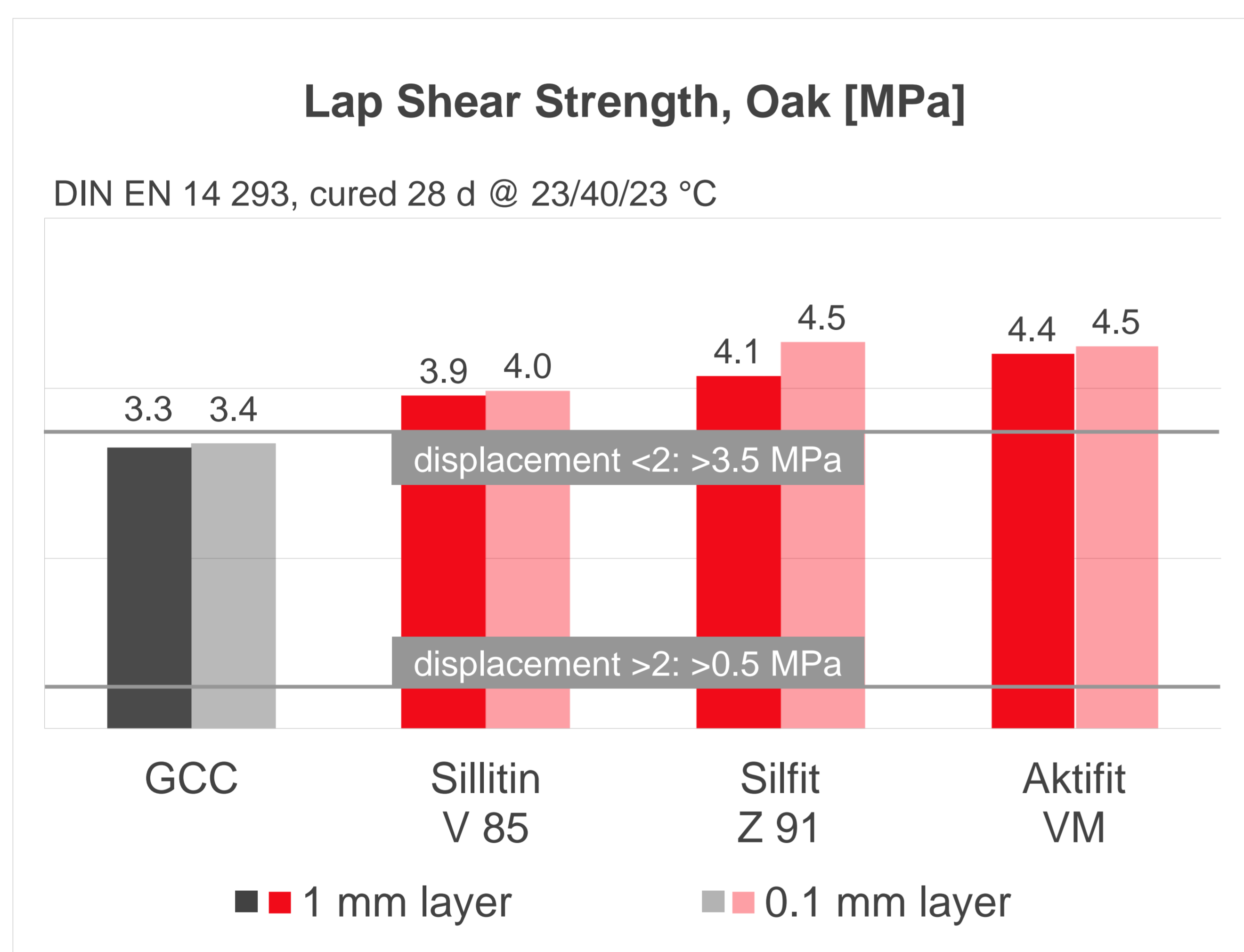
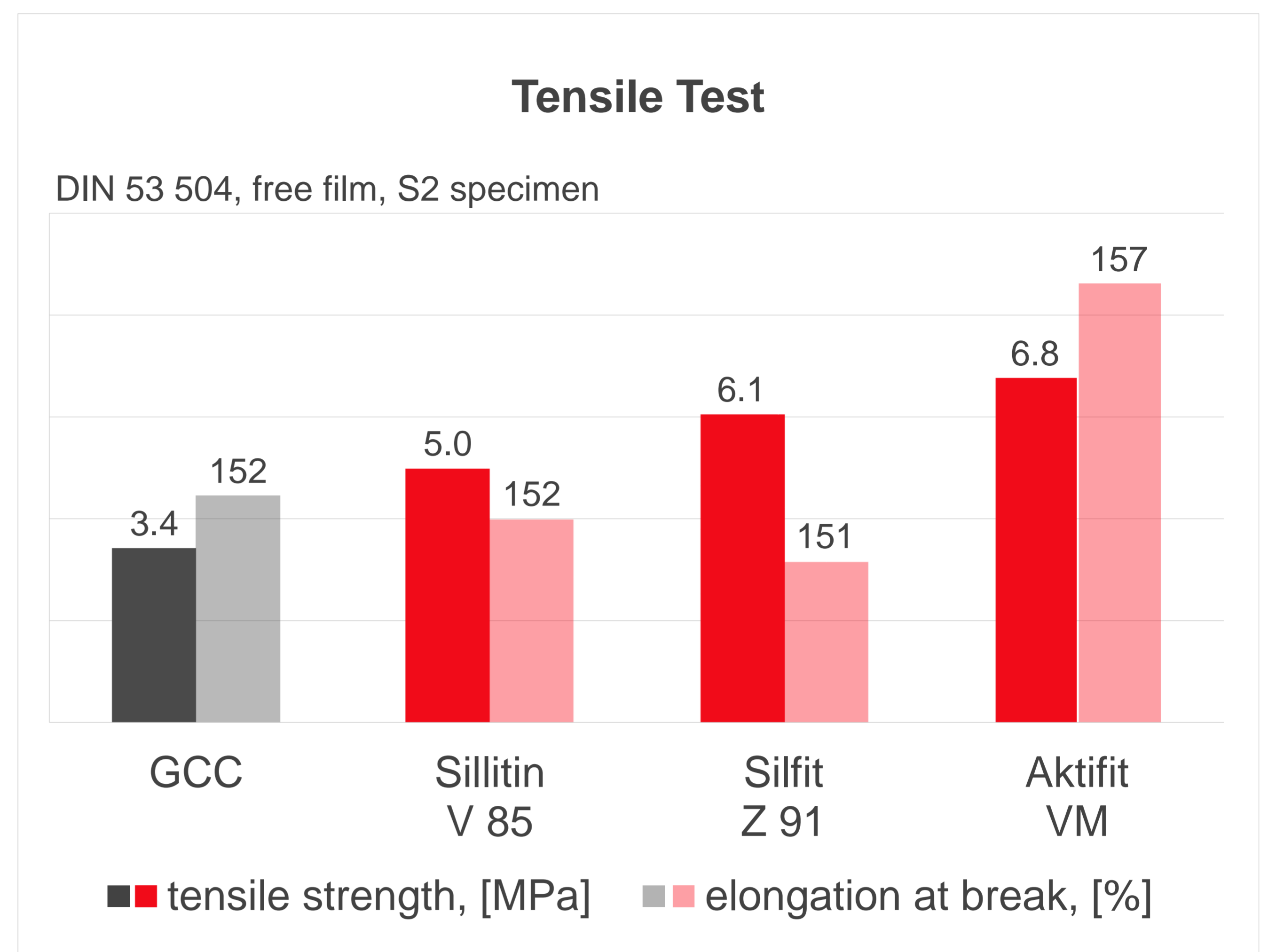
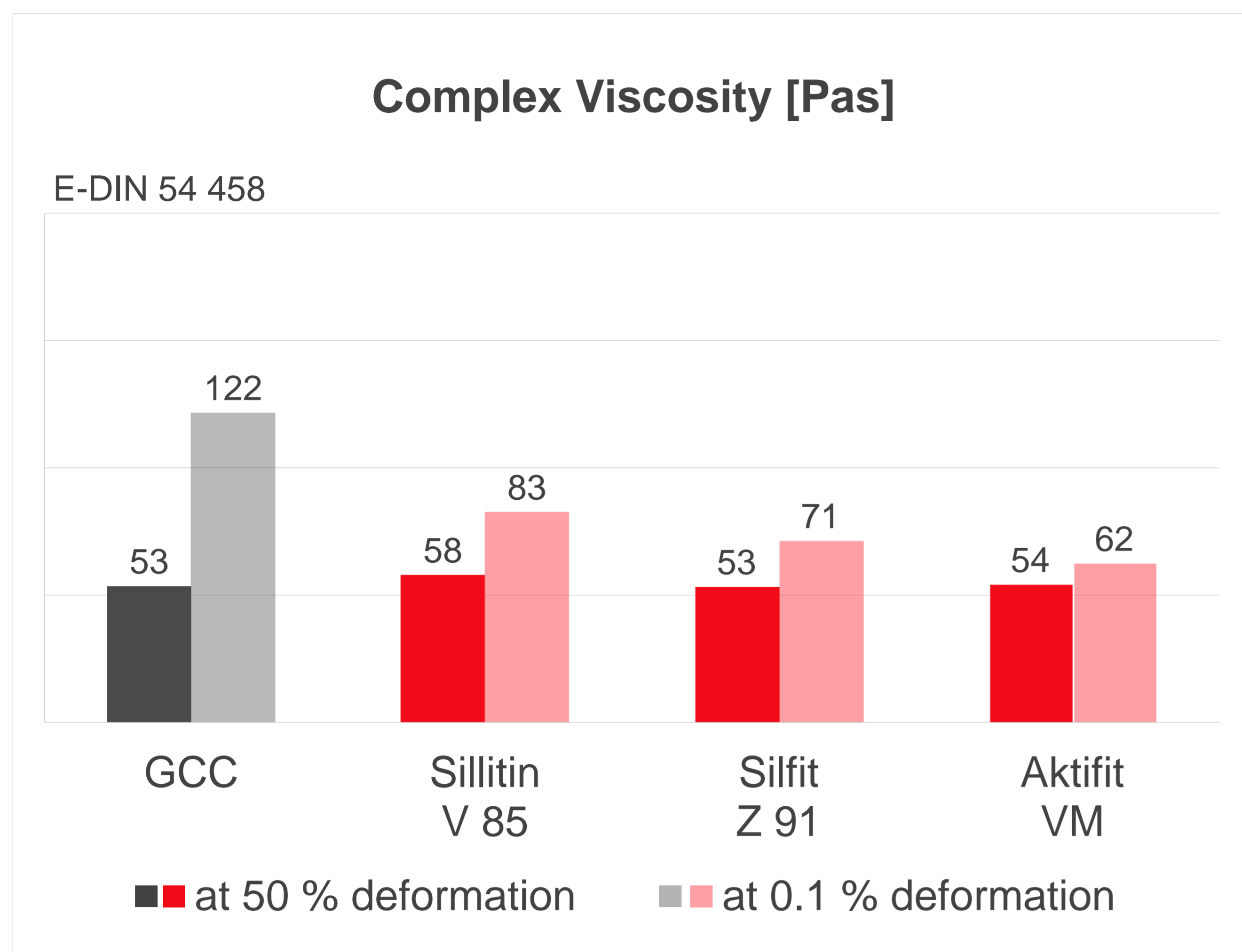
- very low moisture content
- extremely low moisture absorption even under humid conditions
- white and color-neutral
- very high strength
- excellent hot water resistance

Aktifit VM

Neuburg Siliceous Earth vs. calcium carbonate silane-terminated polyether polymer high strength e. g. parquet adhesive



Results



Benefits

Benefits of NEUBURG SILICEOUS EARTH compared to calcium carbonate:

- rheology can be adjusted via filler and fumed silica content
- higher tensile strength along with similar elongation at break
- markedly higher lap shear strength
- high lap shear strength remains even after immersion in hot water
- formulations with Neuburg Siliceous Earth meet the requirements of DIN EN 14293 for „soft“ as well as „hard“ adhesives