

NEUBURG SILICEOUS EARTH VS. CALCIUM CARBONATE SILANE-TERMINATED POLYETHER POLYMER COST SAVINGS SOFT PARQUET ADHESIVES

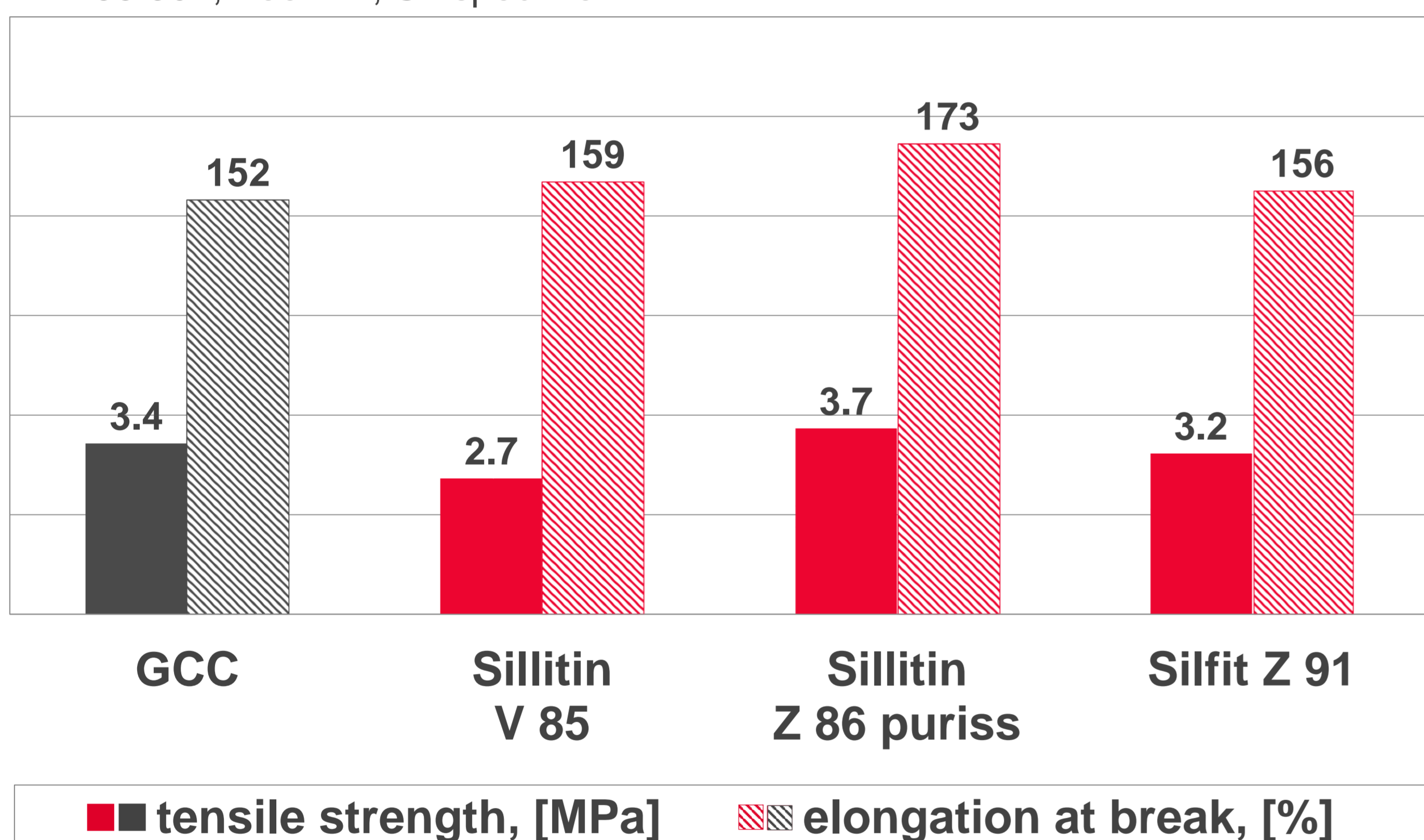
FORMULATION

Control Formulation with GCC high in polymer			pbw or % by weight		Neuburg Siliceous Earth low in polymer	
					pbw	% by weight
GENIOSIL® STP-E 10 Silane-terminated polyether	Polymer	25.5	reduced	15.5	16.7	
Caradol ED 56-200 Polypropylene glycol	Plasticizer	15.0	increased	25.0	26.9	
GENIOSIL® XL 10 Vinyl silane	Drying agent	2.0		2.0	2.2	
HDK H 18 Fumed silica	Rheological additive	2.5		2.5	2.7	
GCC (d ₅₀ = 5 µm) Ground calcium carbonate	Filler	54.0	replaced + reduced	47.0	50.4	
GENIOSIL® GF 96 Amino silane	Adhesion promoter	1.0		1.0	1.1	
Total		100.0		93.0	100.0	

RESULTS

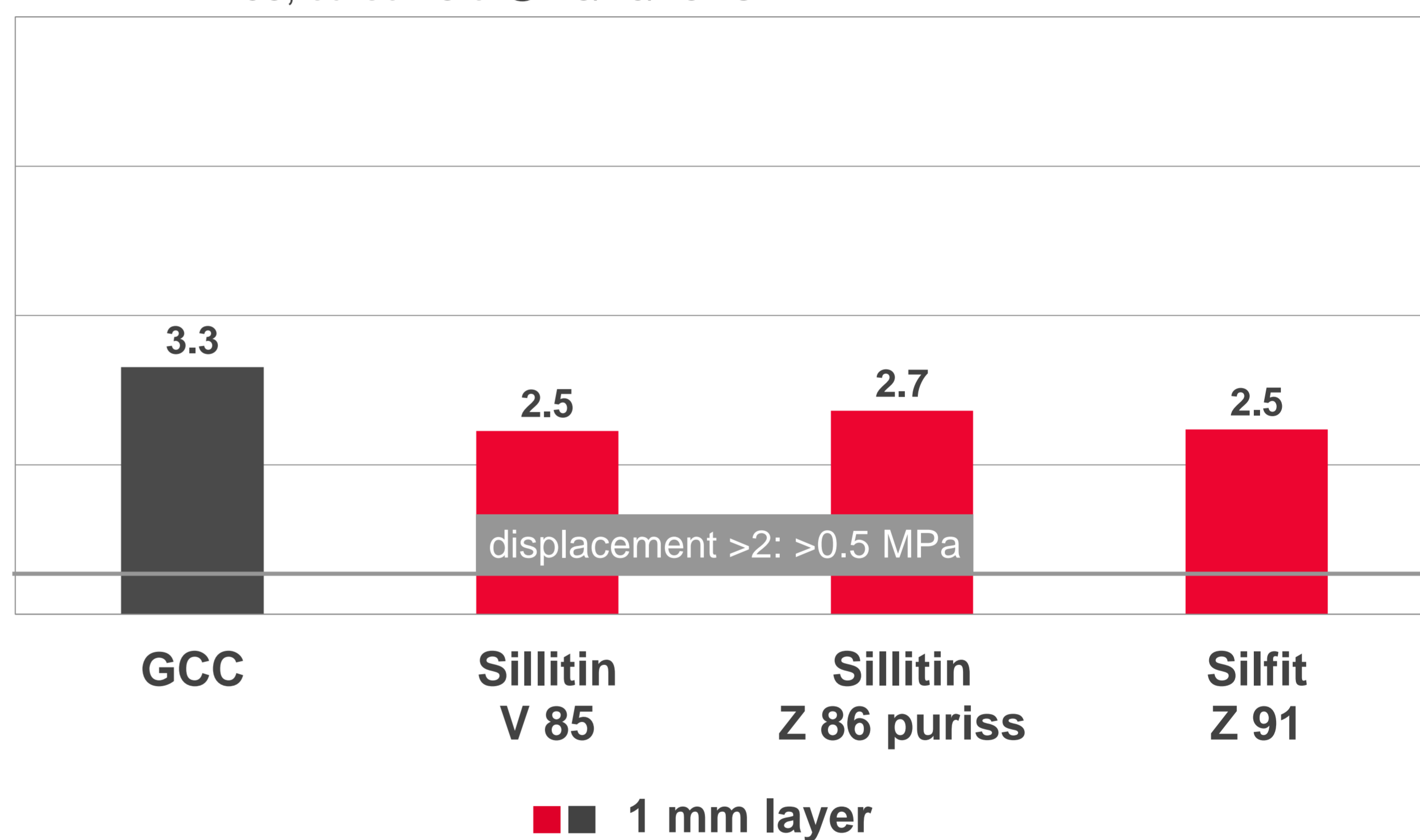
Tensile Test

DIN 53 504, free film, S2 specimen



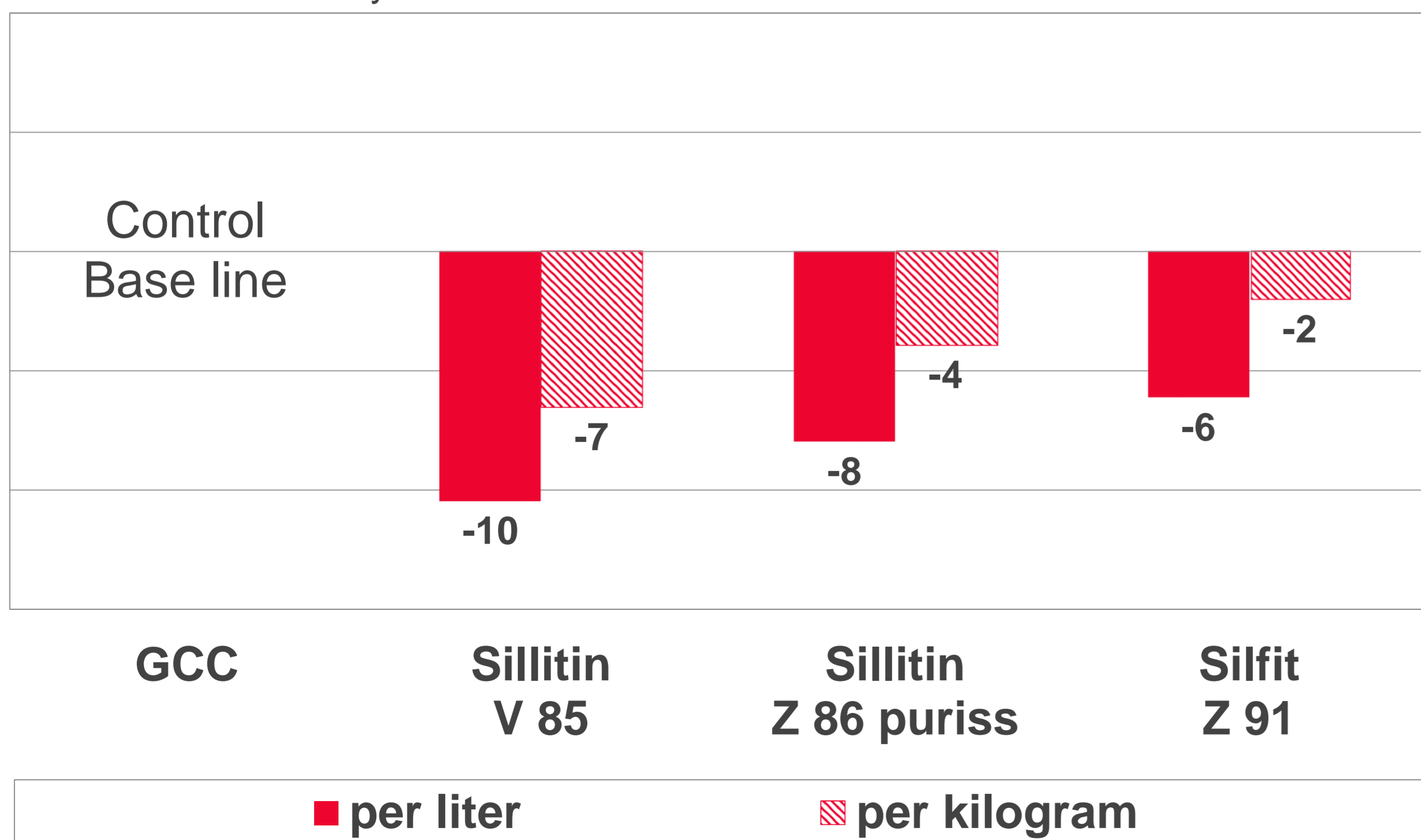
Lap Shear Strength, Oak [MPa]

DIN EN 14 293, cured 28 d @ 23/40/23 °C



Cost Savings in Raw Material [%]

Price basis: Germany 2012



- very cost-effective
- low viscosity

Sillitin V 85

- high strength

**Sillitin Z 86
puriss**

- low moisture content
- white and color-neutral
- low viscosity

Silfit Z 91