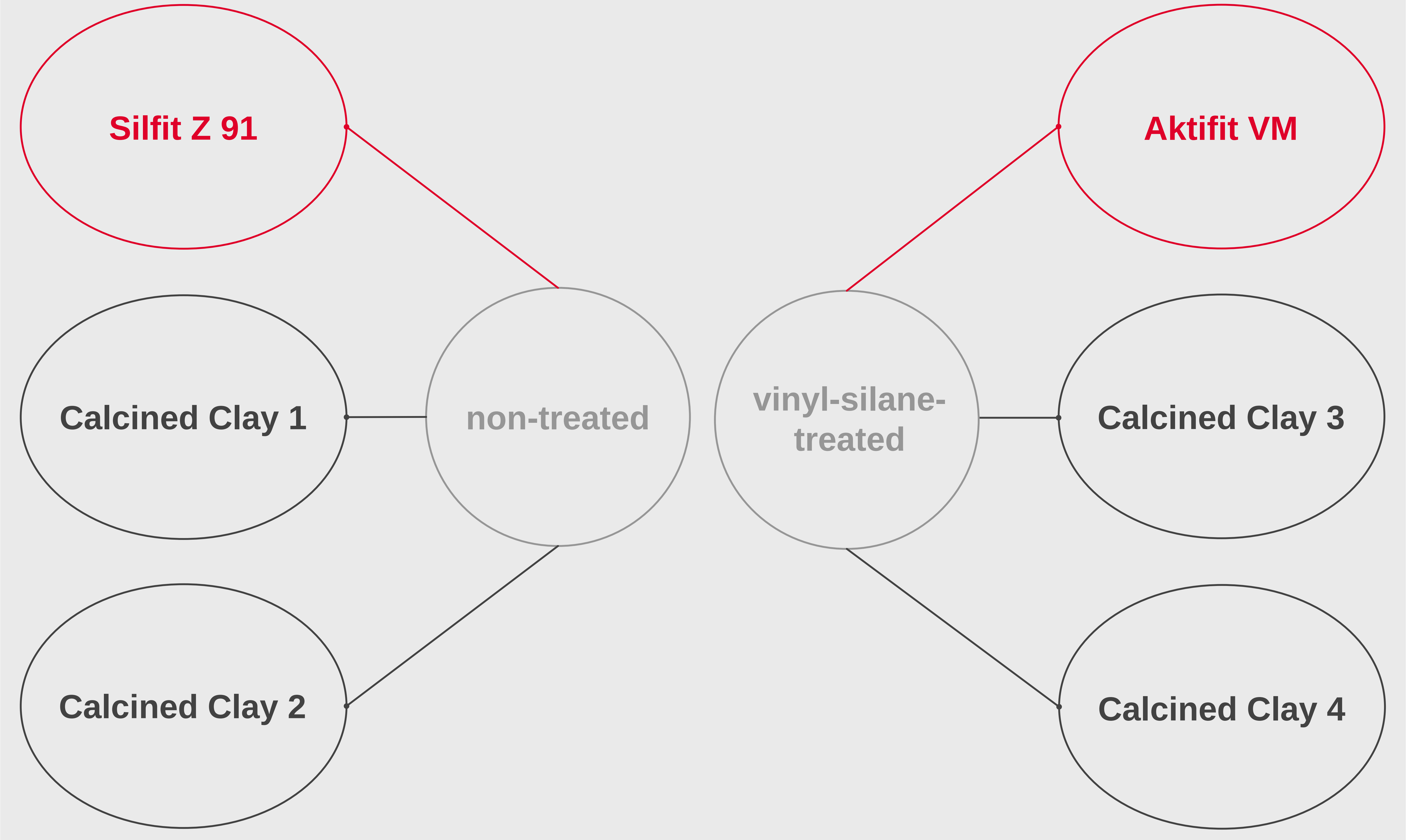


NEUBURG SILICEOUS EARTH IN HIGH VOLTAGE CABLE INSULATIONS

FORMULATION

in phr	with additional vinyl-silane	without additional vinyl-silane
EPDM*	100.00	100.00
Masterbatch (ZnO, Pb ₃ O ₄ , PE)*	14.61	14.61
Vulkanox HS/LG	1.28	1.28
Perkadox BC-FF	1.83	1.83
Paraffinic wax*	5.01	5.01
Vinyl-silane (Silquest A-172 NT)	0.75	-
Mineral filler	60.00	60.00
Total	183.48	182.73
	*kindly provided by Brugg Kabel AG	

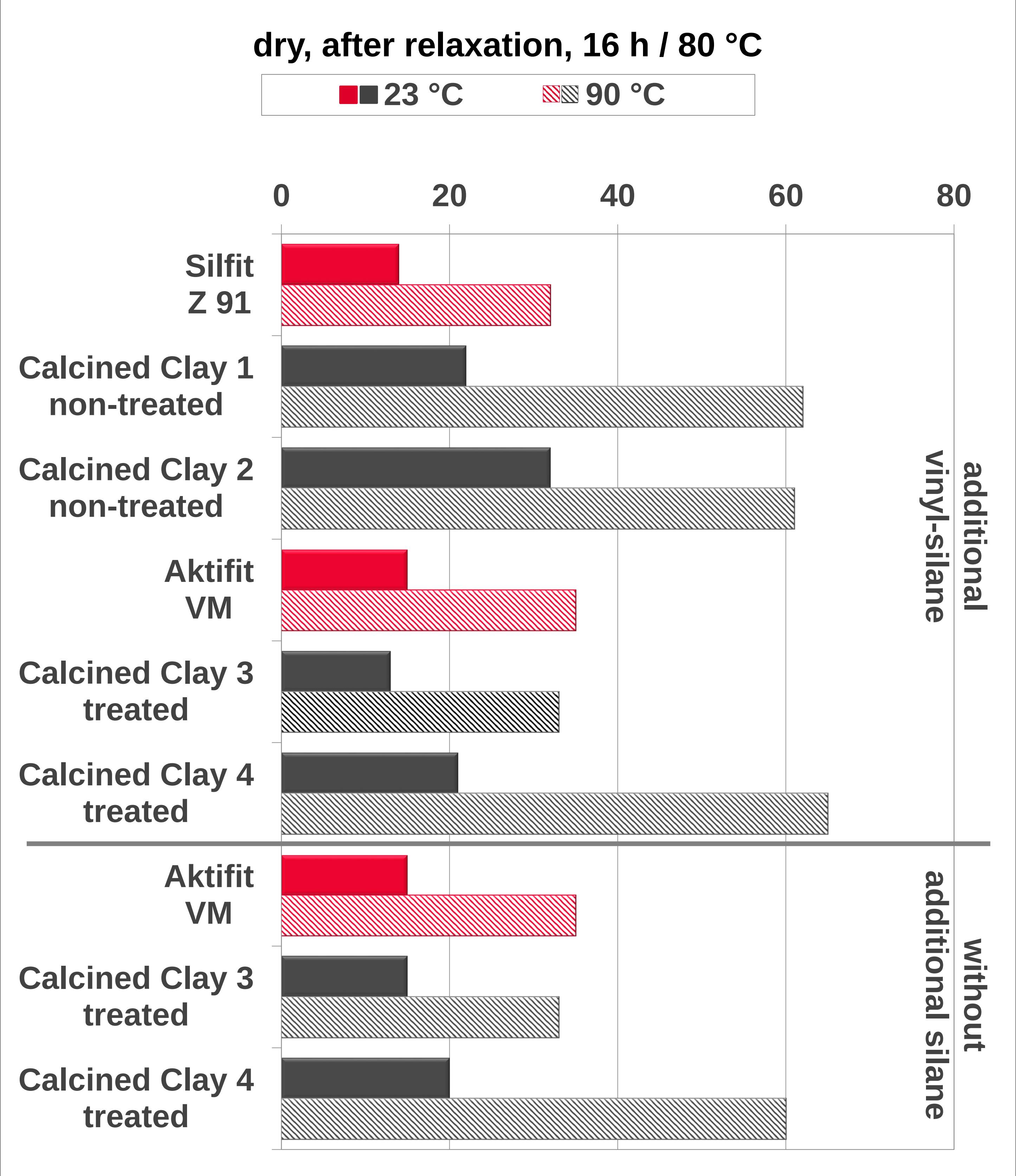
MINERAL FILLERS



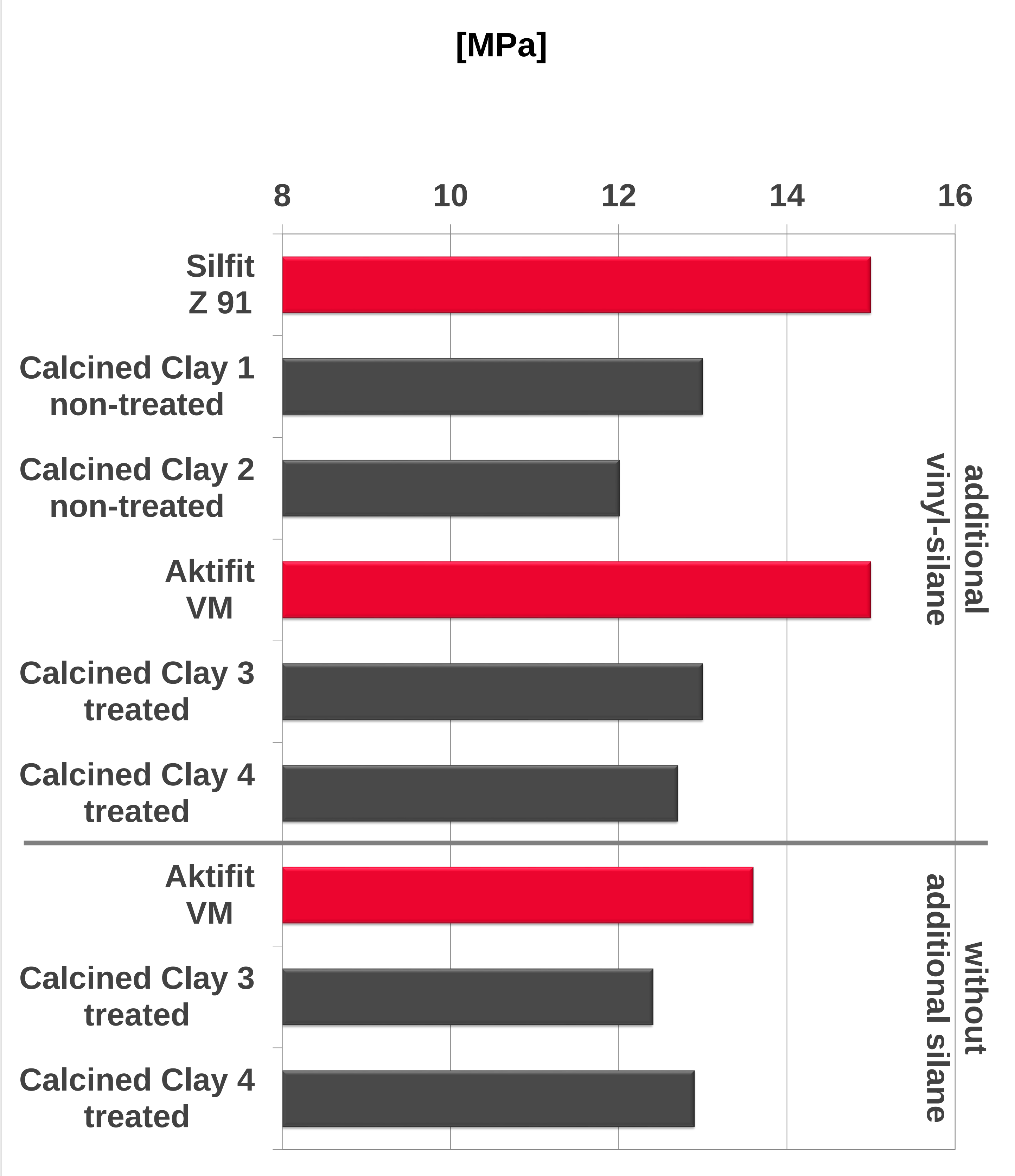
NEUBURG SILICEOUS EARTH IN HIGH VOLTAGE CABLE INSULATIONS

RESULTS

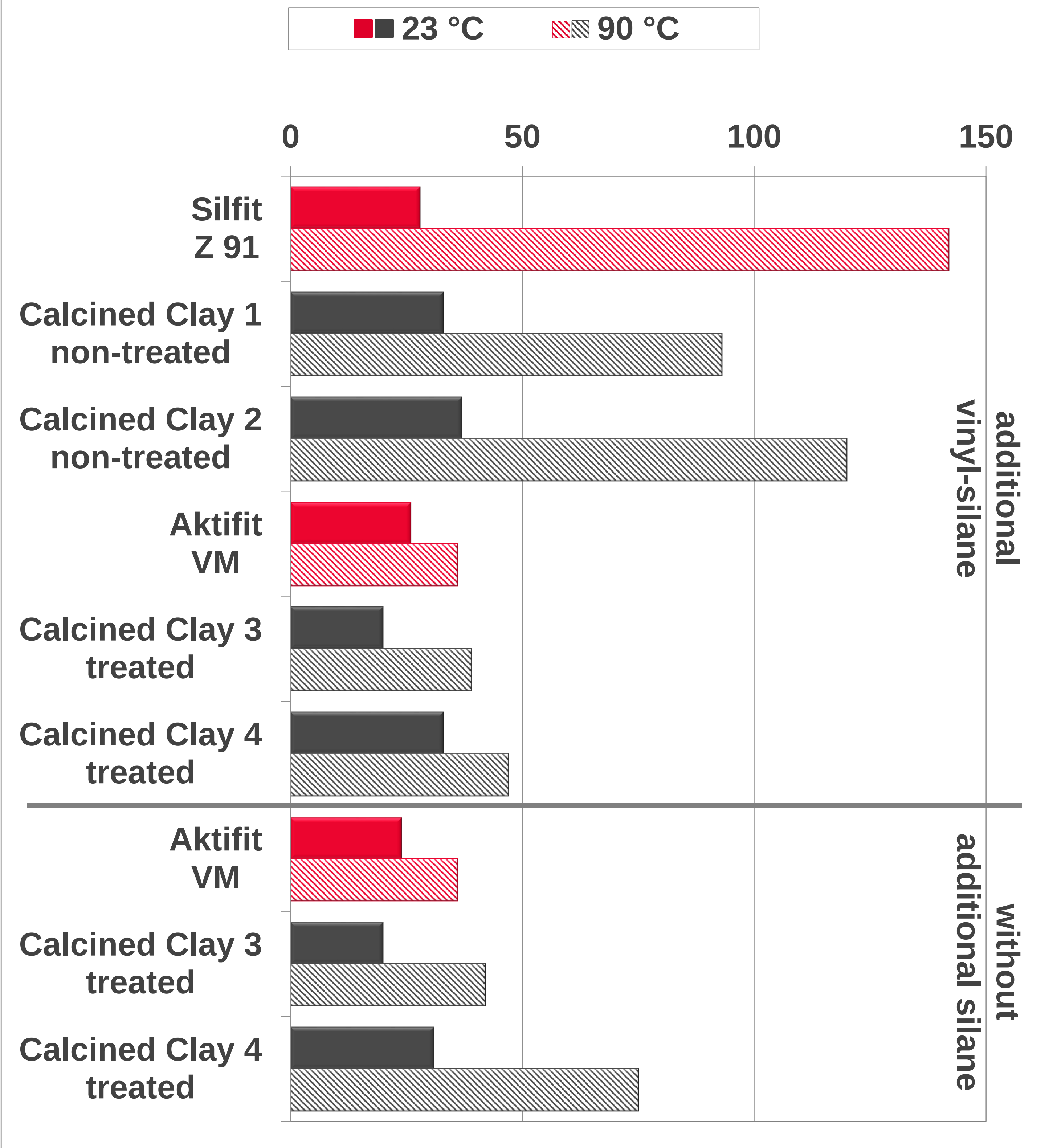
Dielectric Loss Factor $\tan \delta$, x 10⁻⁴



Tensile Strength



after immersion in water, 1000 h / 90 °C



BENEFITS OF CALCINED NSE

- lower levels of sieve residue with calcined NSE than with calcined clays
- excellent dispersion
→ low pressure filter test value may be expected
- Silfit Z 91 outperforms non-treated calcined clays in dry dielectric losses and tensile strength
- Aktifit VM succeeds in best results – at least at the level of the best performing surface treated calcined clay – including a higher tensile strength
- with Aktifit VM no additional vinyl-silane necessary