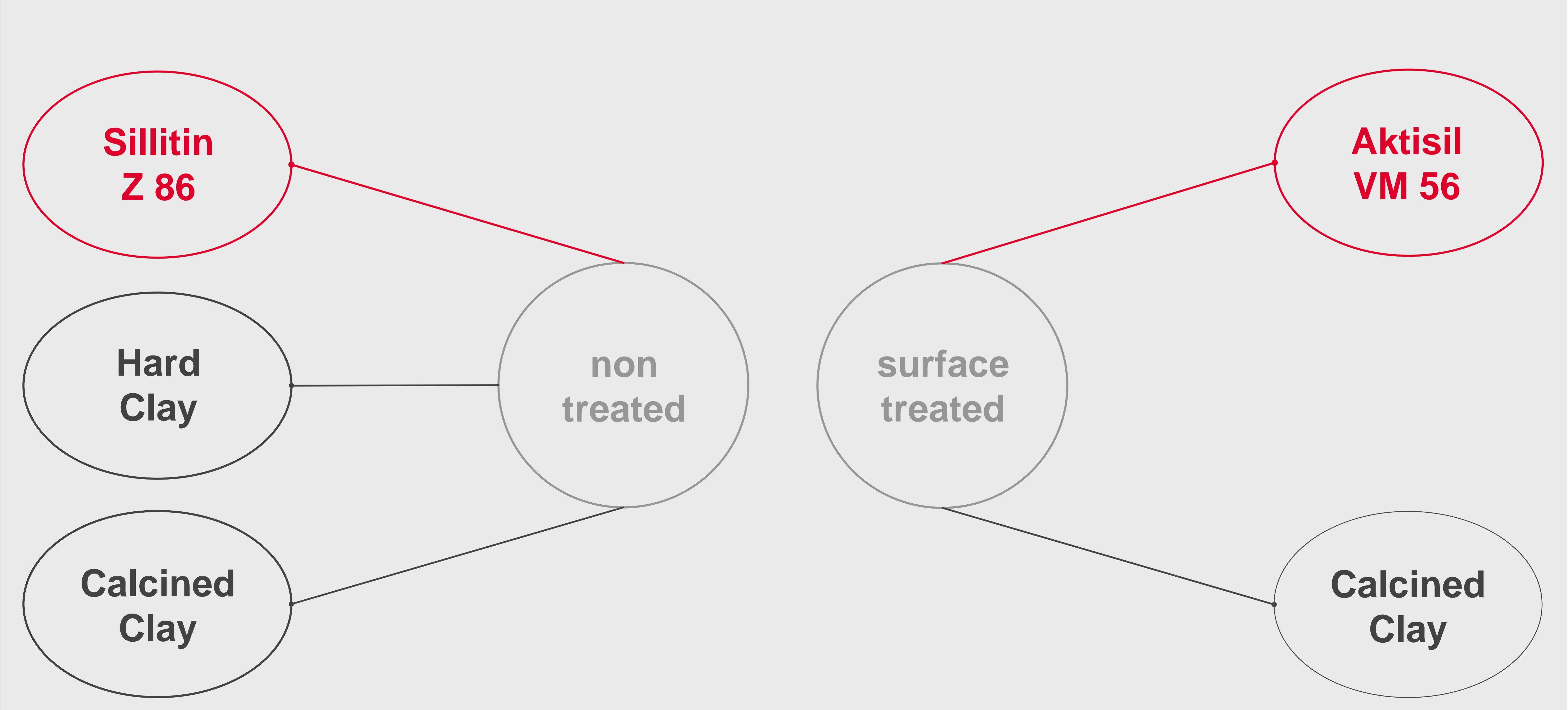


# NEUBURG SILICEOUS EARTH IN NON-BLACK FILLERS IN PEROXIDE CURED EPDM CABLE INSULATION COMPOUNDS

## FORMULATION

in phr	without whiting	with whiting
Buna AP 258 (Buna EP G 3963)	130.0	100.00
Stearic acid	1.0	14.61
Zinkoxyd aktiv	5.0	1.28
Paraffin 54/56	4.0	4.0
Mineral Filler	225.0	125.0
Whiting	-	100.0
Sunpar 2280	15.0	15.0
Vulkanox HS/LG	1.0	1.0
Vulkanox MB/MG	0.5	0.5
TAC GR 50 %	2.0	2.0
Perkadox 14/40 pd	8.0	8.0
Total	391.5	391.5

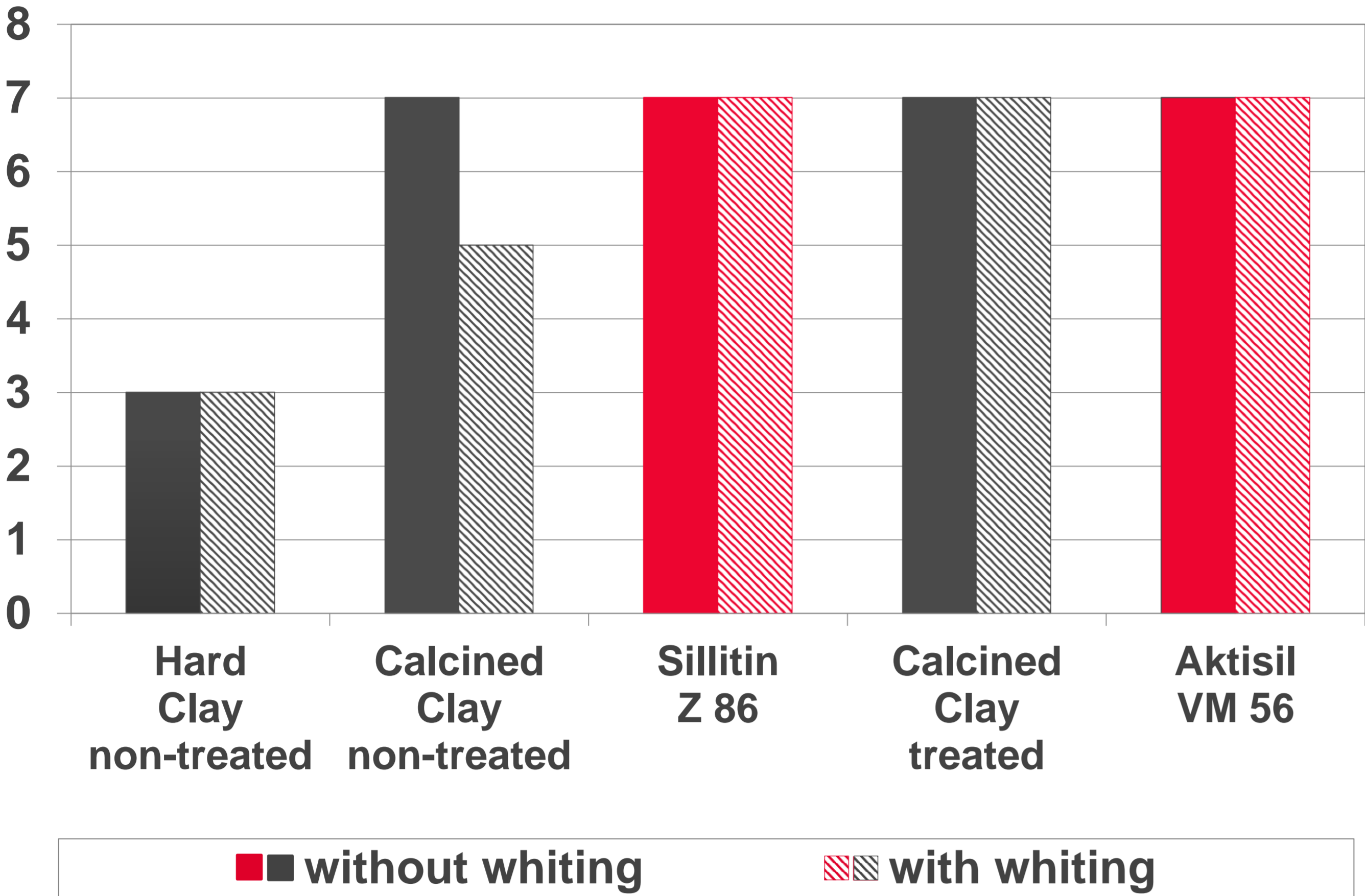
## MINERAL FILLERS



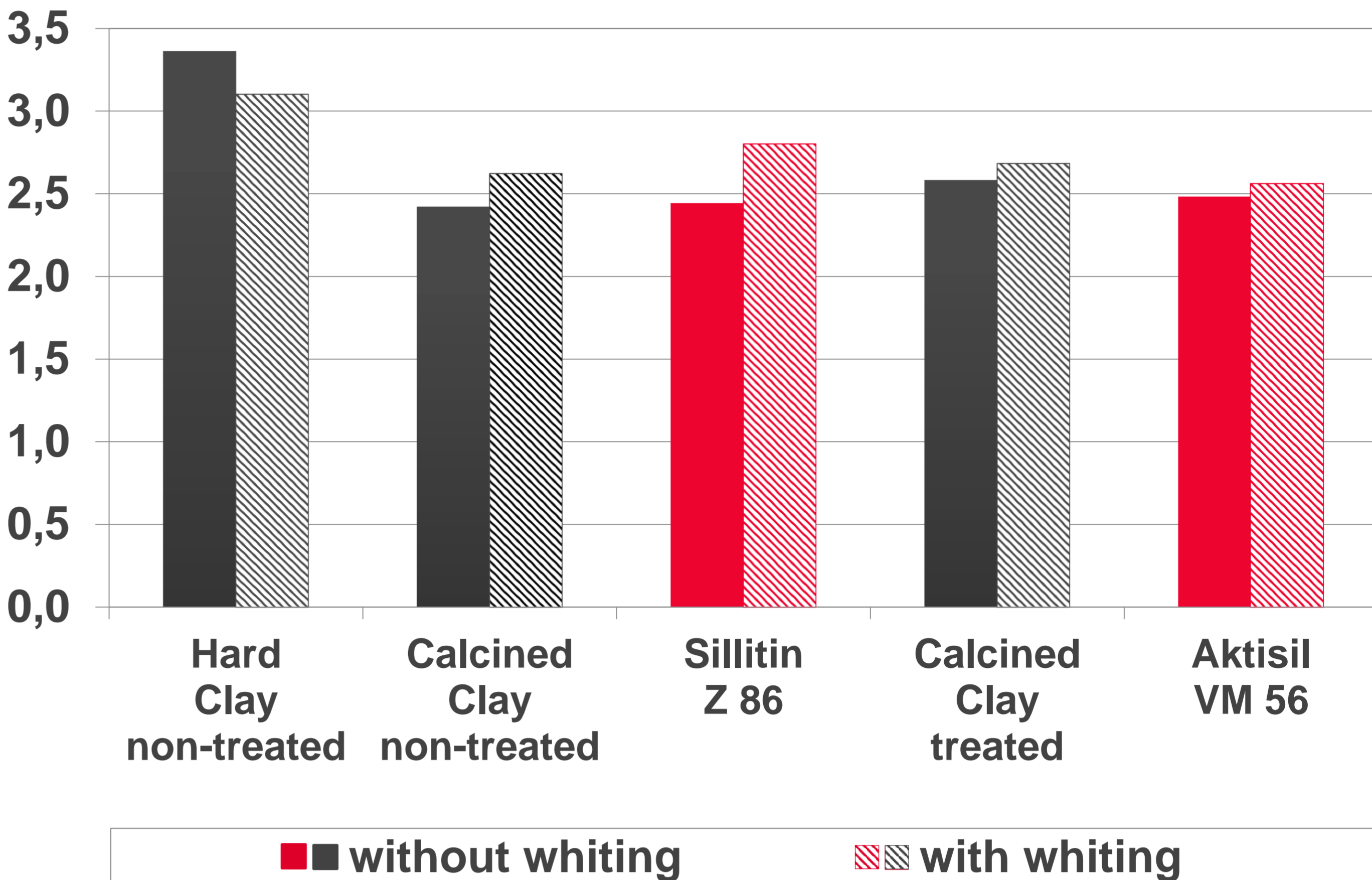
# NEUBURG SILICEOUS EARTH IN NON-BLACK FILLERS IN PEROXIDE CURED EPDM CABLE INSULATION COMPOUNDS

## RESULTS

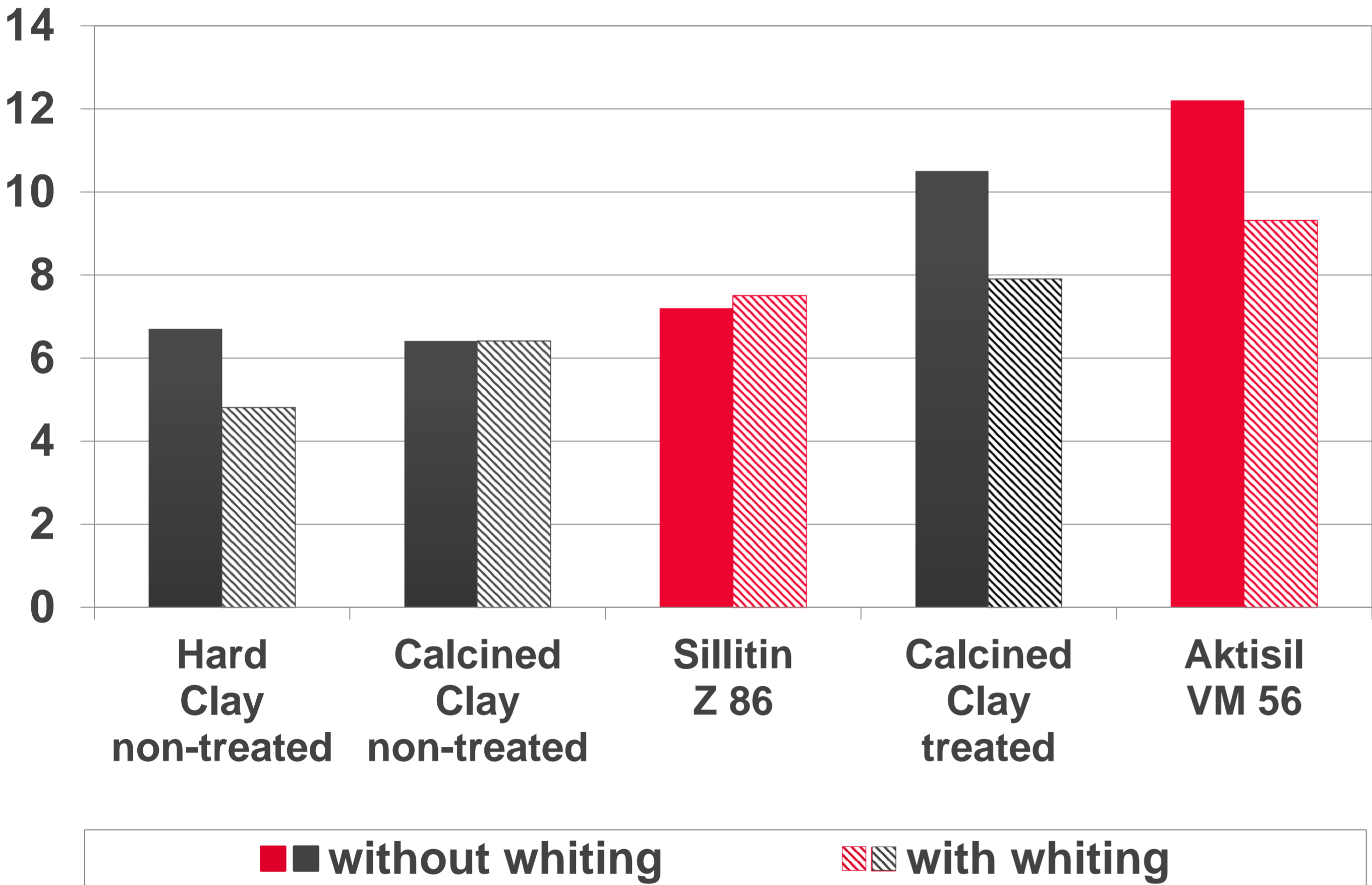
Garvey Extrusion 50 rpm – Rating (Swelling + Surface)



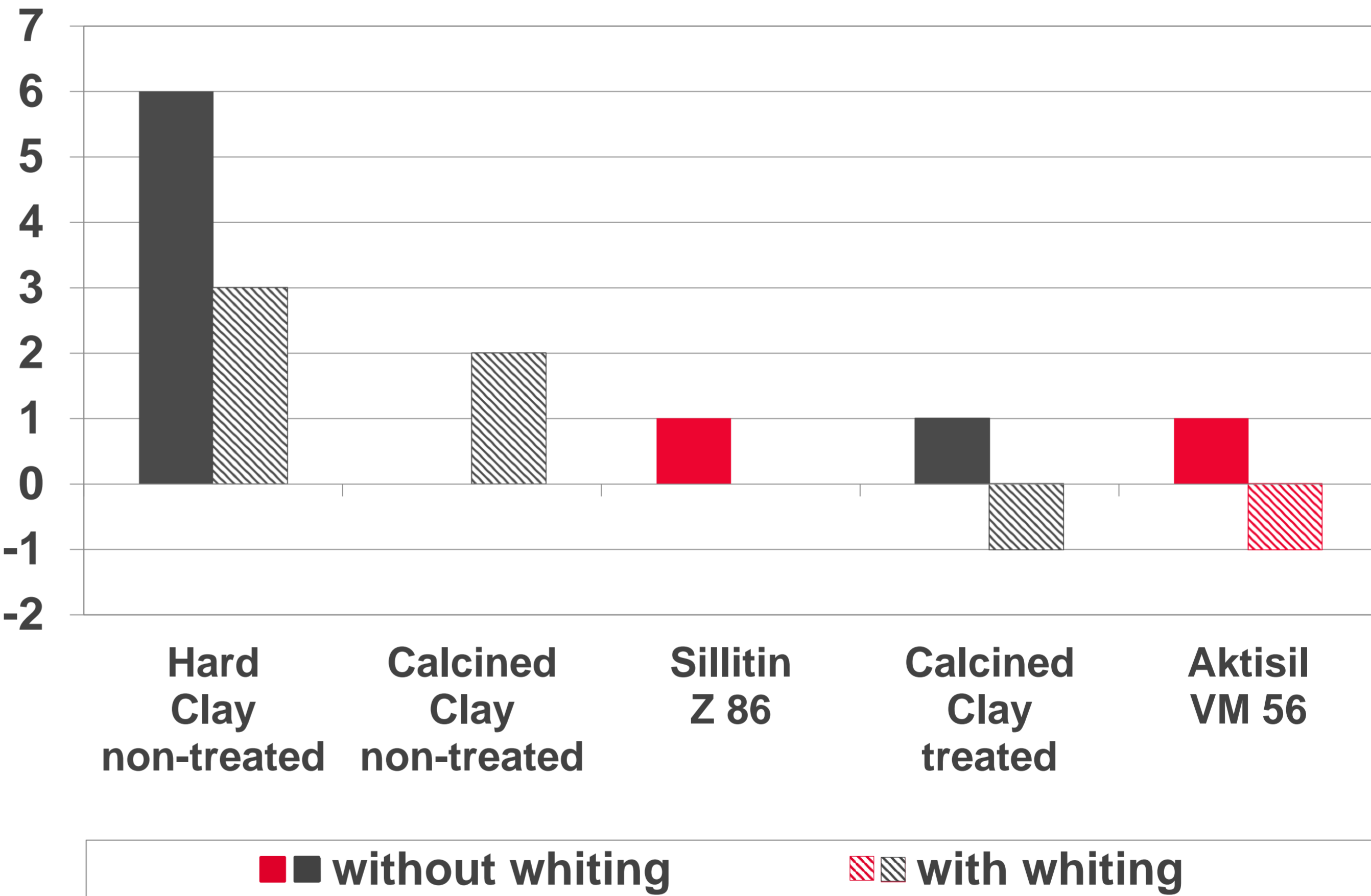
Output 50 rpm [m/min.]



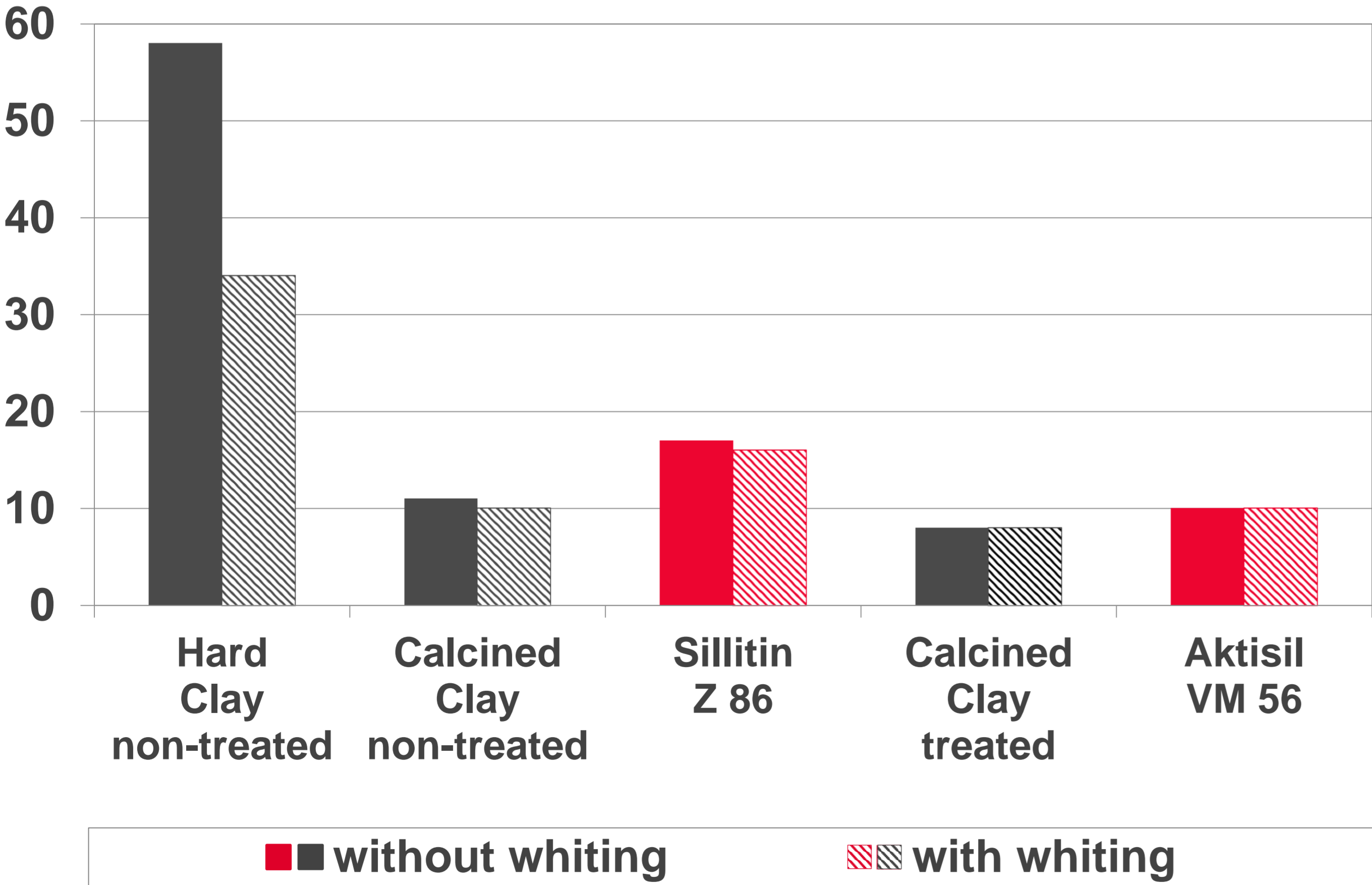
Tensile Strength [MPa]



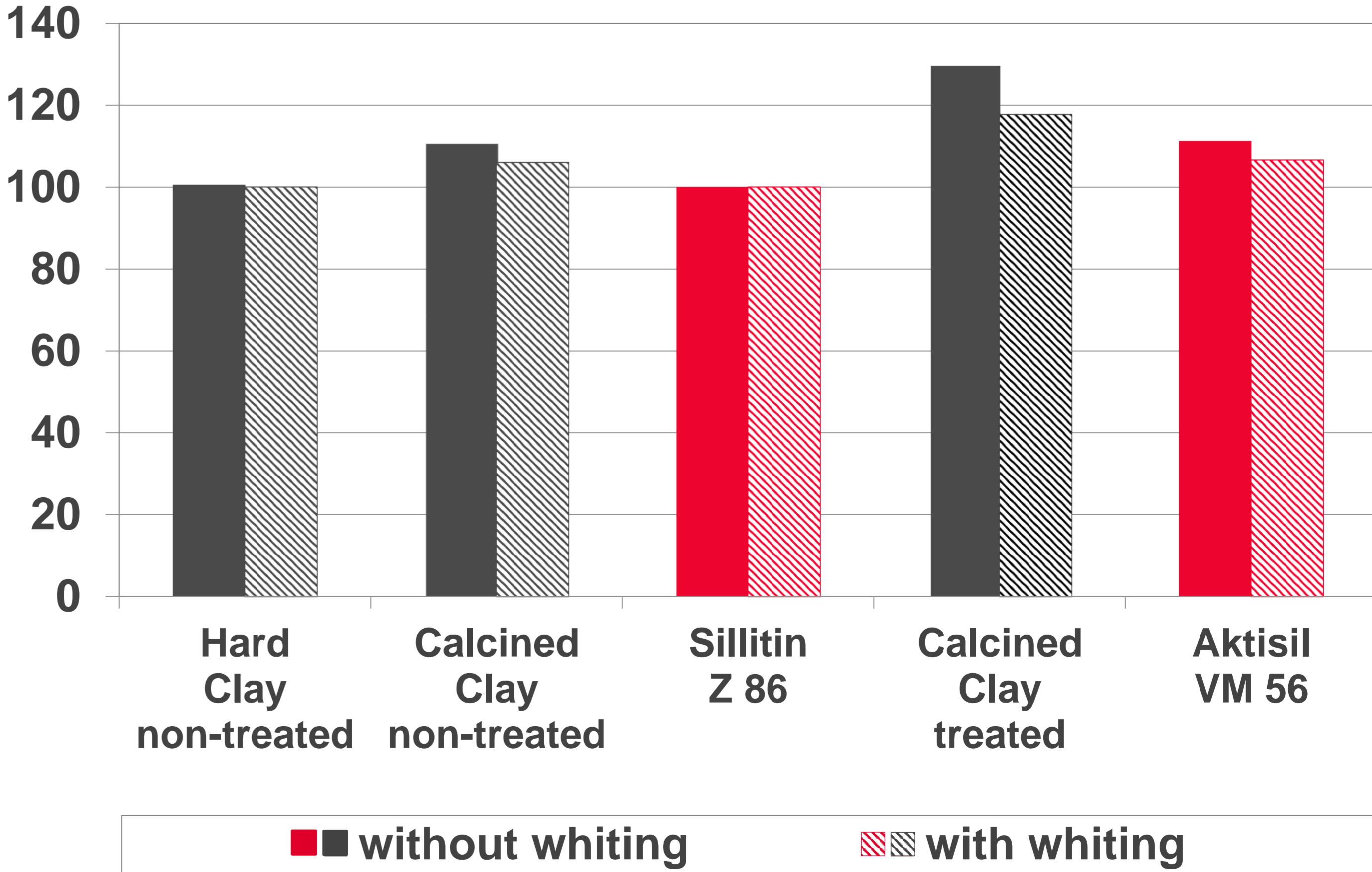
Change of Hardness [Shore A]  
after Hot Air Aging, 168 h / 100 °C



Compression Set, 24 h / 100 °C [%]



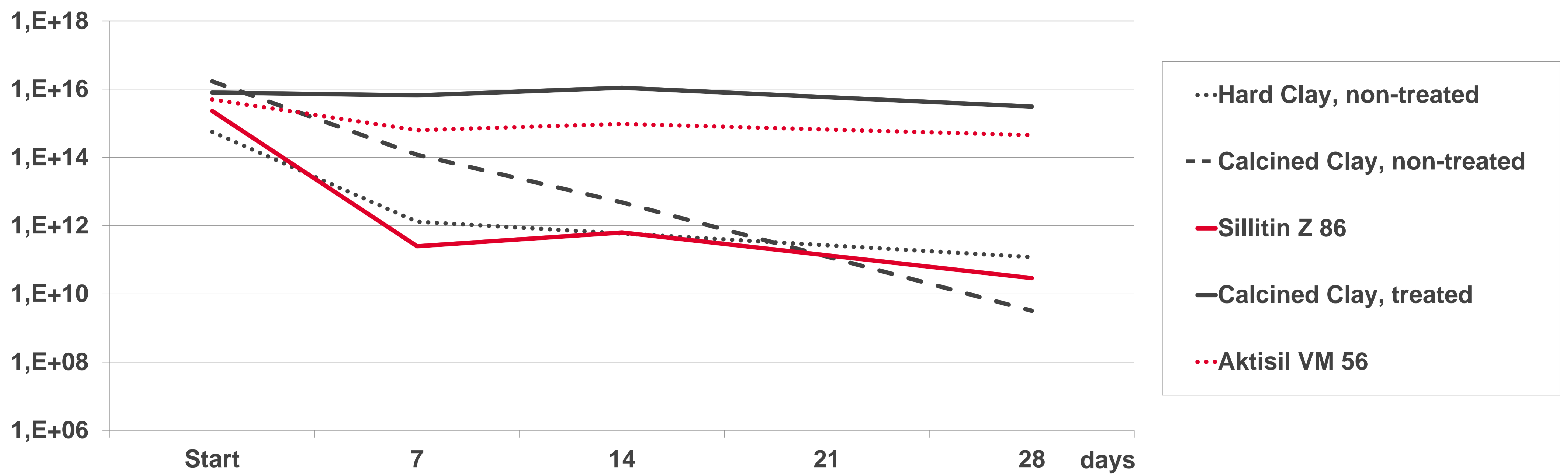
Compound Raw Material Cost Indices, Volume Related  
Germany 2009, Basis: Sillitin Z 86



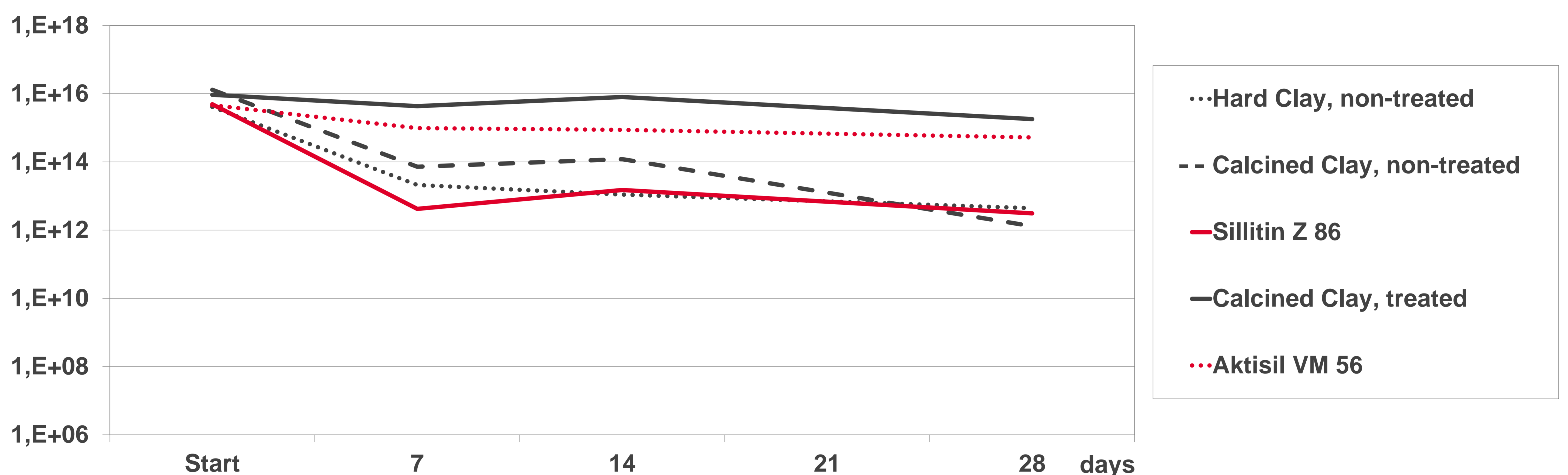
# NEUBURG SILICEOUS EARTH IN NON-BLACK FILLERS IN PEROXIDE CURED EPDM CABLE INSULATION COMPOUNDS

## RESULTS

Volume Resistivity [ $\Omega \cdot \text{cm}$ ] – without Whiting  
Immersion in Deionized Water at 70 °C



Volume Resistivity [ $\Omega \cdot \text{cm}$ ] – with Whiting  
Immersion in Deionized Water at 70 °C



### Non-treated Fillers

- Hard Clay
  - the weakest filler in combination with as well as without whiting
- Calcined Clay and Sillitin Z 86
  - similar results in combination with whiting
  - Sillitin Z 86 superior without whiting
- best suited non-treated filler including cost considerations
  - ✓ Sillitin Z 86

### Surface treated Fillers

- Calcined Clay and Aktisil VM 56
  - equal level in both combinations
- best suited product in this comparison including cost considerations
  - ✓ Aktisil VM 56