NEUBURG SILICEOUS EARTH IN UV-CURING WOOD COATINGS: TRANSPARENT PRIMER POLYETHER ACRYLATE

OBJECTIVE

Comparison of Neuburg Siliceous Earth to competitive fillers in relation to

- **Sedimentation**
- **Optical properties**
- **Abrasion resistance**

Competitive Fillers:

Talc
or
Clay
or
Mica

Neuburg Siliceous Earth:

Sillitin V 88
or
Aktisil MAM

FORMULATION

	Control no filler	with filler
Laromer PO 84 F	100	100
Filler	-	10
Omnirad 500	3	3
Total [parts by weight]	**103**	**113**
Curing: mercury UV lamp at 80 W/cm; speed 15m/min; two passes		

NEUBURG SILICEOUS EARTH
IN UV-CURING WOOD COATINGS: TRANSPARENT PRIMER POLYETHER ACRYLATE

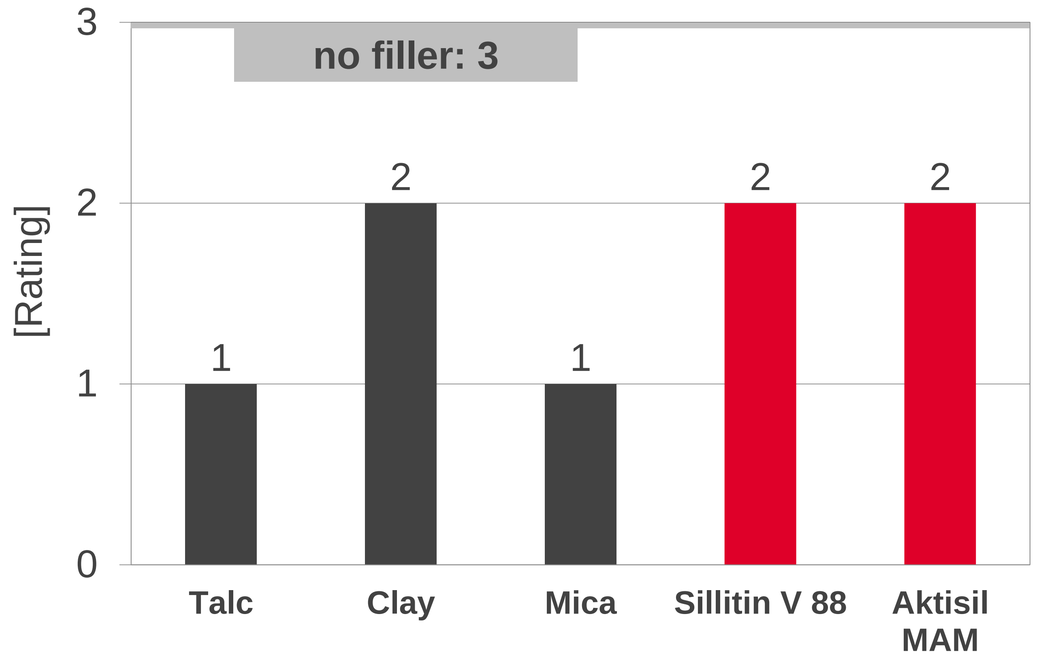
RESULTS

Sedimentation

	after 1 d	after 7 d
Talc	no	no
Clay	no	yes
Mica	no	yes
Sillitin V 88	yes	yes
Aktisil MAM	no	no

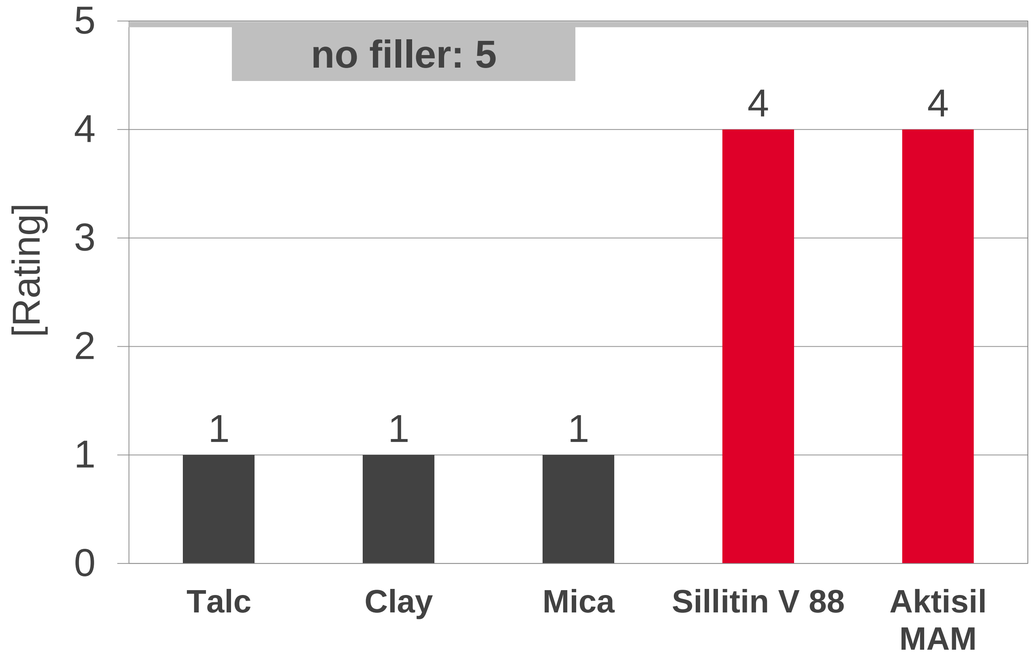
Inherent Color of the Varnish

1 = gray; 2 = low; 3 = none



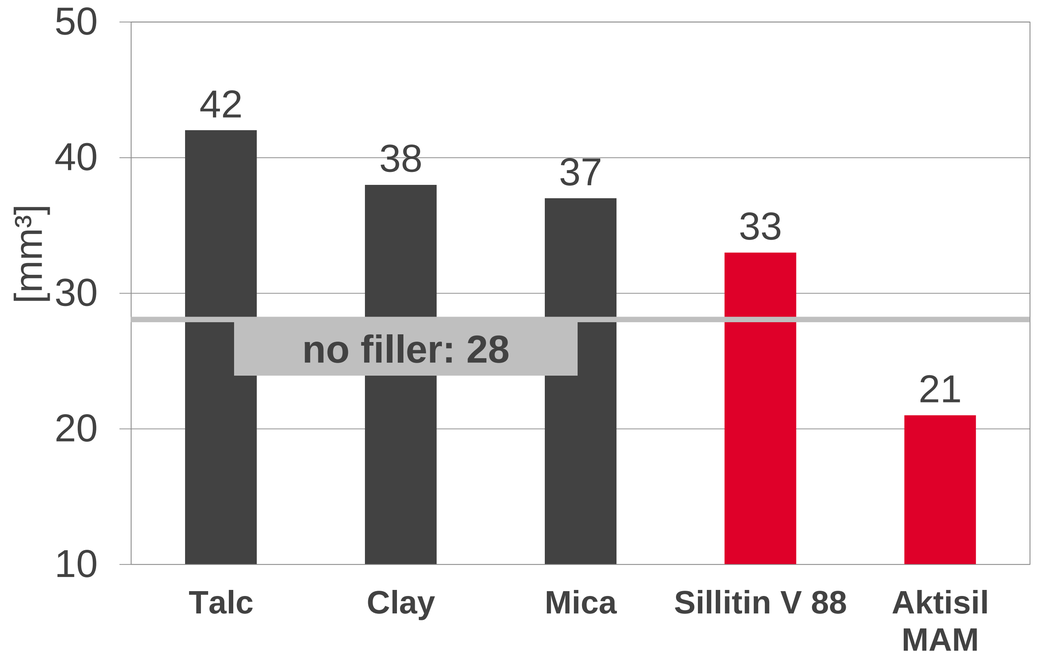
Transparency of the Film

0 = not acceptable; 5 = excellent



Abrasion Loss

Taber CS 10, 1 kg, 55 rpm, 1000 revolutions



SUMMARY

Neuburg Siliceous Earth offers:

- low inherent color of the varnish
- good film transparency
- high abrasion resistance
- sandability by machine is maintained

Especially with Aktisil MAM:

- lower sedimentation tendency
- significantly improved abrasion resistance

Sillitin V 88 offers good properties as a cost-effective filler.

Aktisil MAM is an optimal filler in transparent UV-curing parquet primers for dark and light woods.

HOFFMANN MINERAL