

GLOXIL WW SL in water-based clear coats, i. e. for wood acrylic emulsion



Objective

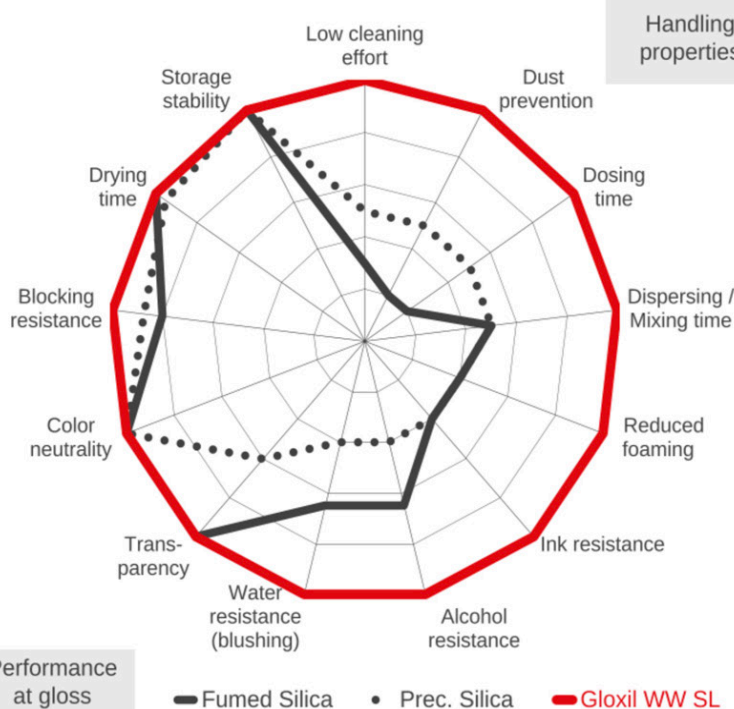
Gloxil WW SL vs. Silica Matting Agents in a Sensitive Binder Emulsion

Formulation

Parts by weight [pbw]	Fumed Silica	Prec. Silica	Gloxil WW SL		
Alberdingk AC 2514	79.5	79.5	79.5	79.5	79.5
Byk 024	0.8	0.8	0.8	0.8	0.8
Butyl diglycol	6.0	6.0	6.0	6.0	6.0
Butyl glycol	2.0	2.0	2.0	2.0	2.0
Water demineralized	7.5	7.5	-	-	-
Matting Agent	2.5	2.5	7.7	15.4	23.1
Aquamat 272	3.3	3.3	3.3	3.3	3.3
Byk 346	0.4	0.4	0.4	0.4	0.4
Rheovis PU 1214	0.5	0.5	0.5	0.5	0.5
Total	102.5	102.5	100.2	107.9	115.6
Solids content w/w [%]	38.7	38.7	39.2	38.4	37.7

Summary

Gloxil WW SL shows already known effects of silica matting agents, but offers the following additional benefits



- Slurry without dust formation
 - Highly improved metering and incorporation
 - Easier and time-reduced mixing without dispersion process
 - Foam-suppressing effect
 - Better early blocking resistance
 - Very high transparency with good long term stability and wood grain enhancement
 - Strong matting effect
 - Superior early water and stain resistance
 - Easy matting level adjustment via post-addition
- ✓ Efficient easy & ready to use liquid matting additive: Cost & time saving, highly versatile and with enhanced performance

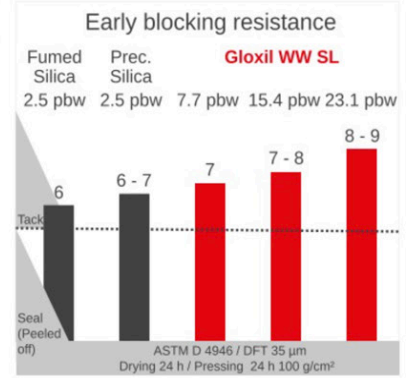
GLOXIL WW SL in water-based clear coats, i. e. for wood acrylic emulsion



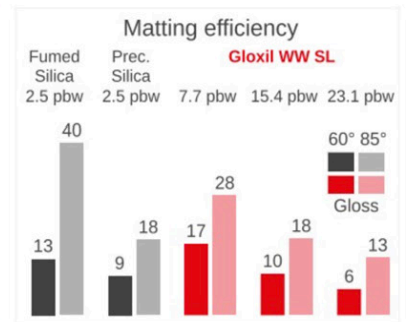
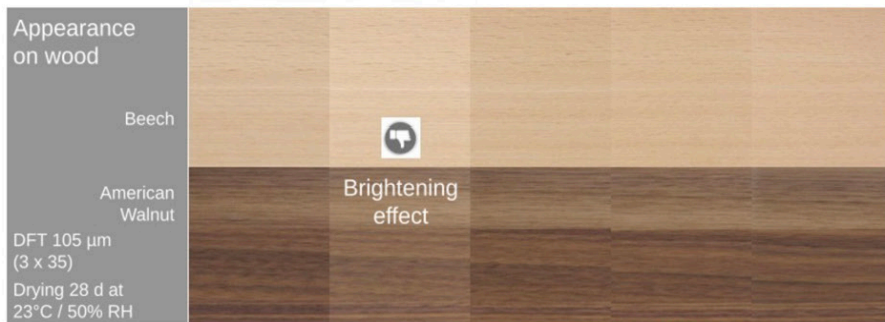
Results

Handling / Processing

Matting Agent	Fumed Silica	Prec. Silica	Gloxil WW SL		
Bulk / Liquid volume	2.5 pbw	2.5 pbw	7.7 pbw	15.4 pbw	23.1 pbw
Dust prevention	no	no	completely		
Dosing / Wetting	1-2 min	1 min	10 sec		
Dispersing / Mixing	High shear	10-15 min	1-2 min Low shear		
Foaming	strong	strong	no		



Optical Properties



Resistance

Resistance	Drying	Exposure	Fumed Silica	Prec. Silica	Gloxil WW SL		
			2.5 pbw	2.5 pbw	7.7 pbw	15.4 pbw	23.1 pbw
Water comparable results with ethanol 48 %	1 h	1 h					
		15 h					
		28 d					
Ink	1 h	1 h					
		15 h					
		28 d					

Blushing effect

Spreading & Staining

vs. Gloss Level / Dosage

Performance against Blushing, Spreading & Staining

