

# GLOXIL MATT IN WATER-BASED CLEAR COATS FOR WOOD

## OBJECTIVE

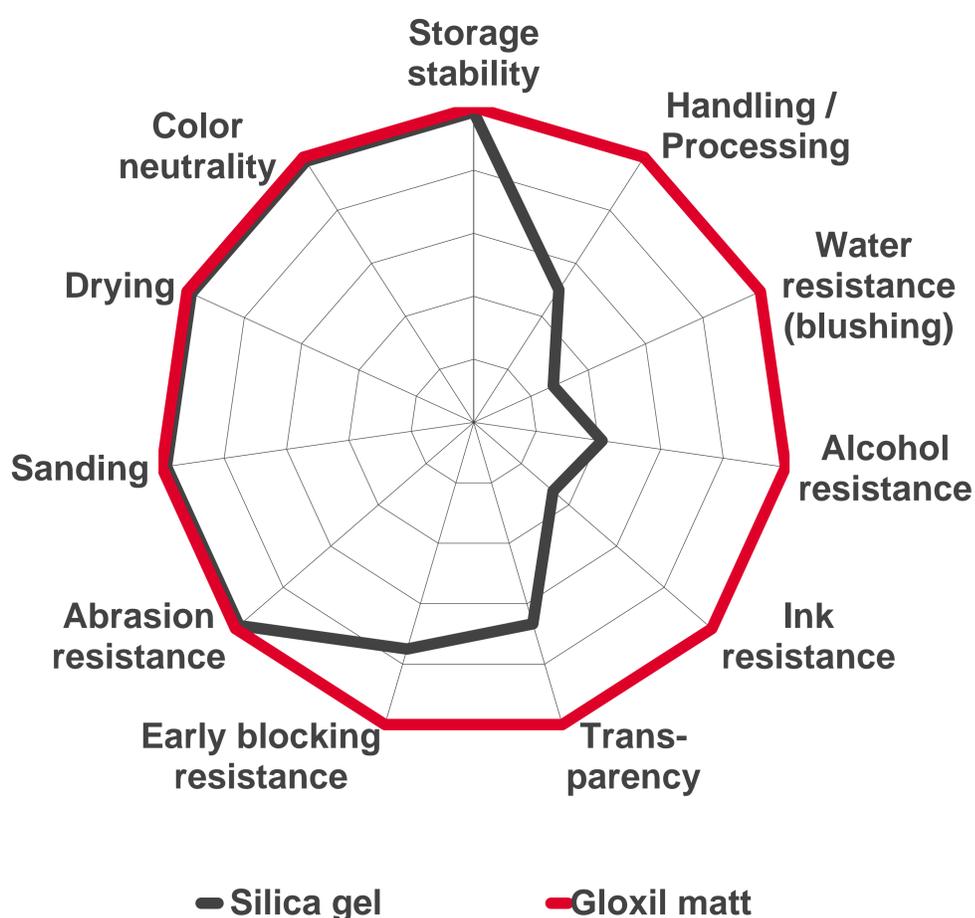
Gloxil matt vs. Matting Agent Silica Gel in a Sensitive Binder Emulsion

## FORMULATION

	Without	→ Increasing matting effect			
Parts by weight [pbw]	Control	Silica gel	Gloxil matt		
Alberdingk AC 2514	79.4	79.4	79.4	79.4	79.4
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	7.5	7.5	7.5
Silica gel	-	2.5	-	-	-
<b>Gloxil matt</b>	-	-	<b>2.0</b>	<b>4.0</b>	<b>6.0</b>
Aquamat 272	3.3	3.3	3.3	3.3	3.3
Byk 346	0.4	0.4	0.4	0.4	0.4
DSX 1514	0.5	0.5	0.5	0.5	0.5
Total	99.9	102.4	101.9	103.9	105.9
Solids content w/w [%]	37.2	38.7	38.4	39.6	40.7
PVC [%]	0.0	3.9	4.7	9.0	12.9

## RESULTS AND ADVANTAGES

At comparable gloss (60°) ~ 15 - 20 units



**Gloxil matt** advantages:

- + easier handling / processing
- + earlier blocking resistance
- + very high transparency and wood grain enhancement with long term stability
- + excellent and early water and stain resistance

Maintaining:

- quick drying / sanding
- good mechanical properties
- very strong matting effect
- high metal marking resistance

# GLOXIL MATT IN WATER-BASED CLEAR COATS FOR WOOD

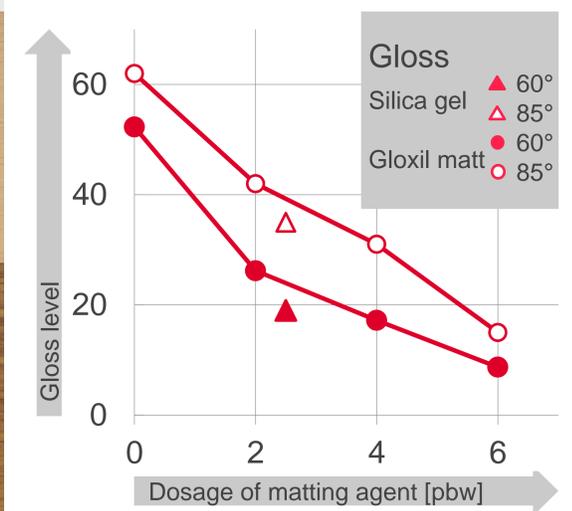
## HANDLING / PROCESSING PROPERTIES

Powder material	Silica gel	Gloxil matt	Paint preparation	Silica gel	Gloxil matt	Early blocking resistance																						
Bulk volume equal weight			Reduced dust formation	☹️	☺️	<table border="1"> <thead> <tr> <th>Without matting</th> <th>Silica gel</th> <th colspan="3">Gloxil matt</th> </tr> <tr> <th>---</th> <th>2.5 pbw</th> <th>2.0 pbw</th> <th>4.0 pbw</th> <th>6.0 pbw</th> </tr> </thead> <tbody> <tr> <td>Tack</td> <td>7</td> <td>6</td> <td>7-8</td> <td>8</td> <td>9</td> </tr> <tr> <td>Seal (Peeled off)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>ASTM D 4946 / DFT 35 µm, Drying 24 h, Pressing 24 h 100 g/cm<sup>2</sup></p>	Without matting	Silica gel	Gloxil matt			---	2.5 pbw	2.0 pbw	4.0 pbw	6.0 pbw	Tack	7	6	7-8	8	9	Seal (Peeled off)					
Without matting			Silica gel	Gloxil matt																								
---	2.5 pbw	2.0 pbw	4.0 pbw	6.0 pbw																								
Tack	7	6	7-8	8	9																							
Seal (Peeled off)																												
			Incorporation	☹️	☺️																							
Reduced adhesion on surfaces			Dispersibility	☺️	☺️																							
			Reduced foam formation	☹️	☺️																							

## OPTICAL PROPERTIES

Appearance on wood				
Beech		Brightening effect		
American Walnut		Brightening effect		

DFT 105 µm (3 x 35)  
Drying 28 d at 23°C / 50% RH



	Drying	Exposure	Without ---	Silica gel 2.5 pbw	2.0 pbw	Gloxil matt	
Water <small>comparable results with ethanol 48 %</small>	15 h	1 h					
	15 h	16 h					
	28 d	16 h					
Ink	15 h	1 h		Blushing effect			
	15 h	5 h					
	28 d	16 h					

## RESISTANCE PROPERTIES

### vs. Gloss Level / Dosage

### Anti-Blushing / Anti-Staining Performance

