



GLOXIL MATT

Field of application: Paint & Varnish

1. Description

GLOXIL MATT is a matting agent on silica gel basis that has been modified by treatment with a special additive.

During film formation of dispersions, the inclusion of matting agent particles will, therefore, be improved. As a result, despite and along with a matting action, films with good water resistance and stain resistance will be obtained.

Characteristics

Appearance	Free-flowing powder
Color CIELAB scale: L*	99.8
a*	0.0
b*	0.4
Water content (Karl Fischer)	2 %
Residue > 40 µm	10 mg/kg
Density	1.3 g/cm³
Bulk density	0.2 g/cm³
Tamped density	0.3 g/cm³
Particle size distribution D ₅₀	8.0 µm
D ₉₇	20.0 µm
Oil absorption	120 g/100 g

Packaging

Big Bags	240 kg
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Shelf life

24 months if properly stored under cool and dry conditions.



2. Applications

GLOXIL MATT is used as a matting agent in water-based clear coats (varnishes) for wood. Optimum effects are obtained in dispersion binders, which react highly sensitive to matting agents with markedly reduced water and stain resistance. This includes very often dispersions with a higher minimum film formation temperature based on polymers with a higher glass transition temperature.

GLOXIL MATT achieves very good sedimentation stability, excellent transparency without color tint, and outstanding metal marking resistance (mar resistance).

Fields of application

- mat clear coats (varnishes) for wood based on dispersions, in particular acrylic based
- partial and complete replacement of matting agents with improved handling and, in particular, water, alcohol, and stain resistance.

Minimum film thickness:

> 20 µm, less in special cases.

Dosage:

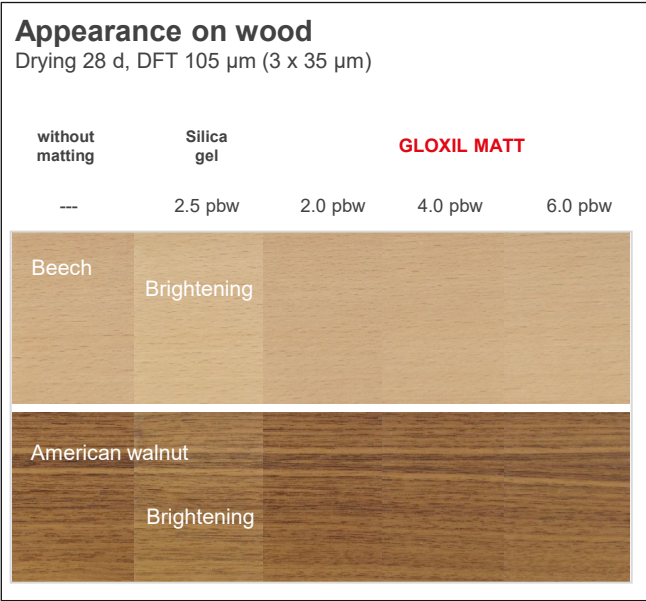
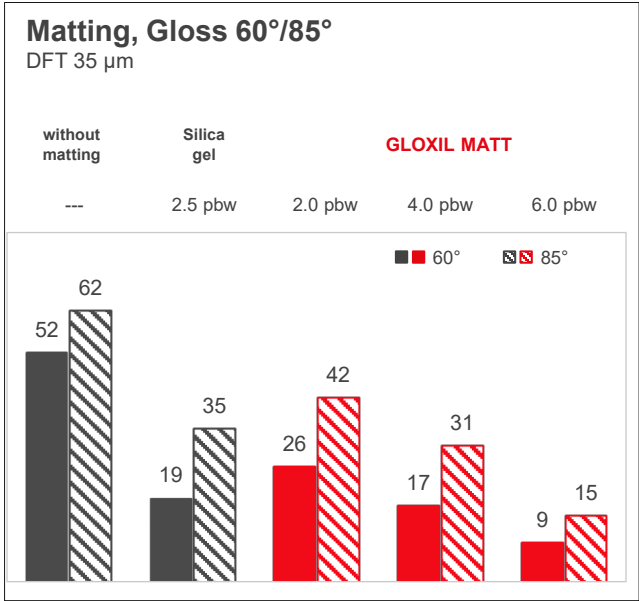
Up to 6 % (m/m) based on total formulation, depending on intended gloss level, see also reverse page of this leaflet.

3. Benefits

- In dry film:**
- very good matting effect
 - very high transparency without any color tint
 - good long term stability of transparency
 - good wood grain enhancement (“Anfeuerung”)
 - good early blocking resistance
 - excellent metal marking resistance (mar resistance)
 - excellent early water resistance (anti-blushing)
 - enhanced stain resistance (ink, alcohol)

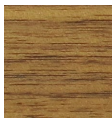
- During processing and in the wet formulation:**
- very low dust formation
 - reduced adhesion of the powder to surfaces
 - easy metering and incorporation
 - excellent dispersibility
 - low to no foam formation
 - low to no sedimentation tendency

4. Effects of GLOXIL MATT in multilayer clear coat based on Alberdingk AC 2514



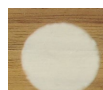
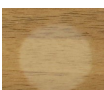
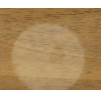
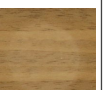
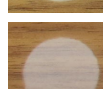
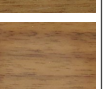
Alcohol resistance

80 d after application, exposure period 16 h

DFT 105 µm (3 x 35)	without matting	Silica gel	GLOXIL MATT		
	---	2.5 pbw	2.0 pbw	4.0 pbw	6.0 pbw
Ethanol 48 %					

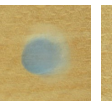
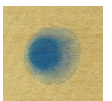
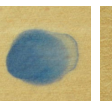
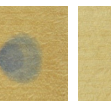
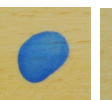
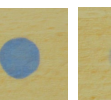
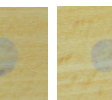
Water resistance

Early and 28 d after application acc. DIN 68861-1, 1A

DFT 105 µm (3 x 35)		without matting	Silica gel	GLOXIL MATT		
Dry- ing	Expo- sure	---	2.5 pbw	2.0 pbw	4.0 pbw	6.0 pbw
15 h	1 h					
15 h	16 h					
28 d	16 h					

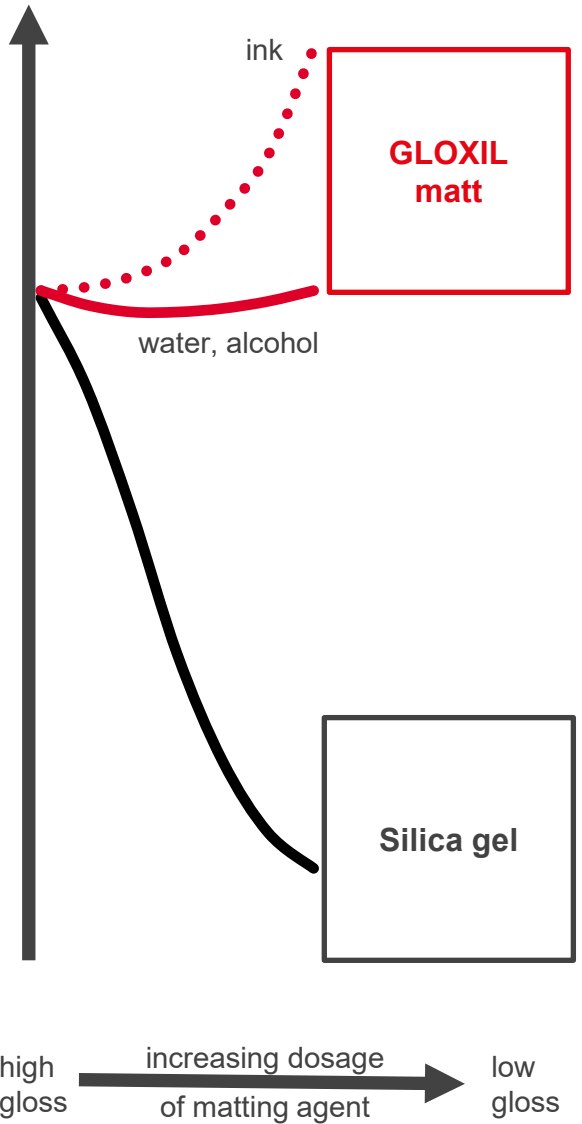
Ink resistance

Early and 28 d after application acc. DIN 68861-1, 1A

DFT 105 µm (3 x 35)		Without matting	Silica gel	GLOXIL MATT		
Dry- ing	Expo- -sure	---	2.5 pbw	2.0 pbw	4.0 pbw	6.0 pbw
15 h	1 h					
15 h	5 h					
28 d	16 h					

Performance of GLOXIL matt

Resistances



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