

## For water resistant bonding...

# KLEIBERIT 303



#### **INFORMATION**



KLEIBERIT 303 the millionfold proven water resistant white glue for bonding according to DIN/EN 204 stress groups D3/D4 with 5% Turbo Hardener. Ideal glue for bonding windows, doors and stairs as well as many other applications.



## Bonding in Shipbuilding

(according to IMO FTP Code Part 5 & Part 2/ approval according to BG Transport (Department Maritime

Safety) for international use according to Module B). Certified application quantity: 150 g/m<sup>2</sup>

KLEBCHEMIE

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#### FIELDS OF APPLICATION

- Window and door production
- Stair construction
- · Bonding in shipbuilding
- Surface bonding on wood based panels (e.g. HPL, CPL, etc.)
- General construction bonding (e.g. tongue and groove, finger jointing, etc.
- Suitable for hard and exotic wood
- Suitable for high frequency bonding

#### **ADVANTAGES**

- As single component glue ready to use
- As two component glue for highest demands
- Suitable for hot and cold bonding
- Short press times
- The composition of KLEIBERIT 303 complies with the FDA Guideline 21CFR § 175.105

#### TECHNICAL PROPERTIES

- KLEIBERIT 303 as a one component glue, meets the requirements of stress group D3 according to DIN/EN 204. (test certificate i.f.t. no. 15-003396-PR01 dated 26.11.2015)
- As a two component glue with 5% KLEIBERIT Turbo-Hardener 303.5, meets the requirements of stress group D4 (test certificate i.f.t. no. 14-002990-PR01 dated 25.11.2014)
- KLEIBERIT 303.0 tested according to EN 14257 (WATT 91).
   (See test certificate of "Fensterinstitut Rosenheim" no. 14-002990-PR02 dated 25.11.2014)
- High bond strength, even with hard and exotic timbers
- Glue line cured (single component glue): tough elastic, colourless
- Glue line cured (two component glue): tough elastic, light yellowish

#### PROPERTIES OF THE GLUE

Base: PVAC dispersion

Mixing ratio: Comp. A : Comp. B = 20 : 1

(weight or volume) 5 % hardener addition

Density: Comp. A approx. 1.10 g/cm³

Comp. B approx. 1.13 g/cm³

pH-value (w/o hardener): approx. 3
Colour of glue: white
Colour of mixture: white
Consistency: medium viscosity
Viscosity at 20 °C: 12,000 ± 2,000 mPa·s

Pot life: (Brookfield RVT spindle 6/20 rpm)
approx. 24 hrs with hardener
Open time (at 20°C): 6-10 minutes (without hardener)

Chalk point: approx. +5 °C

#### APPLICATION TECHNIQUES

The materials to be glued must be free from dust, oil and grease and be acclimatised. The best work temperature is between 18-20 °C. Moisture content of wood when used in:

#### APPLICATION METHOD

- With brush, spatula or glue roller
- With gluing devices fitted to frame presses and dove-tailing machines
- With glue spreaders

All application devices must be made of V2A steel or synthetic materials. Generally single-sided glue application is sufficient. Double-sided application is recommended for hard and exotic timbers!

#### Application quantity:

100-130 g/m<sup>2</sup> for surface bonding 150-200 g/m<sup>2</sup> for solid wood

Open time: 6-10 min. (without hardener)

The open time is influenced by application quantity, absorbability of the materials, moisture content of wood and air and the temperature.

Pot life: approx. 24 hours (with hardener)

Stir in the stipulated amount of hardener until it is mixed well. After the pot life has been exceeded, the remainder can be used as a D3 glue or as a D4 if hardener is once again added. Observe the exact mix ratio! This process can only be repeated <u>once</u>.

#### Pressure:

0.7-1.0 N/mm<sup>2</sup> when bonding lamella or laminated wood

#### Pressing times:

Joint bonding	20 °C	from 15 minutes
Joint bonding (pre-heated)	50 °C	from 5 minutes
Joint bonding	80 °C	from 2 minutes
Surface bonding (HPL panels)	20 °C	15-20 minutes
Surface bonding (HPL panels)	50 °C	approx. 5 minutes
Surface bonding (HPL panels)	80 °C	1 - 2 minutes

When used as a two component glue, the times given should be extended by approx. 50 %. Slight foaming of the mixture does not affect the glue quality and can be eliminated by stirring. The final bond strength according to DIN/ EN 204 will be achieved after 7 days.

#### CLEANING

Application devices, machines and adhesive packaging can be cleaned with water.

#### PACKAGING

#### KLEIBERIT 303:

plastic pail 4.5 kg net, 10 kg, net, 28 kg net carton 12 plastic bottles at 0.5 kg net each

#### KLEIBERIT 303.5 Turbo Hardener:

carton 12 metal bottles at 0.5 kg net each carton 12 metal bottles at 0.7 kg net each

 ${\it Measuring \ cup \ is \ included}.$ 

#### STORAG

Both components may be stored for approx. 1 year at 20 °C in factory sealed containers. The glue is frost resistant down to -30 °C. Before use bring up to room temperature and stir well.

Version 0916: replaces previous versions

#### **IDENTIFICATION**

 Identification
 KLEIBERIT
 303.0:
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 according
 to
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#### TECHNICAL DATA

### KLEIBERIT 303 waterproof PVAC glue



#### SERVICE

Our application department may be consulted at any time without obligation. The statements herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself the suitability of our products for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical consultancy service, which is rendered free of charge and without obligation.