Klebit 304.0

Two-component glue with colourless hardener for waterproof bonding according to DIN EN 204, bond quality D 4. Certificate by window testing institute (Fensterinstitut) Rosenheim

Fields of application

- Bonding of windows and doors
- Lamination of window and door frames
- Manufacture of partitions and element parts
- Bonding of laminate boards
- Bonding of tenons and dovetailings
- Bonding and laminating of hard and exotic woods
- Bonding in high frequency field Advantages
- Suitable for hot and cold bonding .
- Short press time

Properties of the bond

- KLEBIT 304.0 with hardener meets the requirements of bond quality D 4 according to DIN EN 204 (see test certificate no. 505 18692 and no. 505 18693 from 04.06.1997)
- High bond strength, also with hard and exotic woods
- Tough-elastic glue film which gives a good tool life

Properties of the glue

Base: aqueous dispersion Specific weight of the mixture: KLEBIT 304.0 + Hardener 304.2 = about 1,03 g/cm² KLEBIT 304.0 + Hardener 304.3 = about 1,10 g/cm² ph-value of the mixture: approx. 3 Colour of the mixture: white Consistency of the mixture: low viscosity Viscosity at 23° C - Brookfield RVT sp.4/ 20 rpm: KLEBIT 304.0 = 5.500-7.500 mPa s Open time at 20° C: 4 - 6 Minutes Chalk point with Hardener: approx. + 3°C

Mixture = approx. 4,500 mPa s

Identification: KLEBIT 304.0: Identification not required according to German regulation GefStoffV (see our safety data sheet)

Available Hardeners:

Specification	KLEBIT 304.2	
Colour	colourless	
Dosage	5 % weight ratio	
-	approx. 4 % volume ratio	

Pot life at 20°C*	approx. 48 hours		
Application	exotic woods under all conditions		
Fields	some-what shorter press times		
Identification	Identification required according to German regulation GefStoffV, contains Aluminum nitrate, irritating, flood splashes with water immediately (refer to safty data sheet)		
Specification	KLEBIT 304.3		
Colour	colourless		
Dosage	5 % weight ratio		
-	approx. 4 % volume ratio		
Pot life at 20°C*	4 - 7 days		
Application	standard hardener for soft wood.		
fields	good processing conditions		
Identification	Identification required according to German regulation GefStoffV, contains Aluminum chloride, irritating, flood splashes with water immediately		
	(refer to safty data sheet)		

* Attention: Higher temperatur of the glue shortens the pot life

Application tools

- manually with paint brush, spatula or glue roller
- glue application devices
- glueing devices for tenons and dovetails

Application devices have to be of V2A-Steel or plastic

Application techniques

The materials to be bonded must be free from dust, oil and grease and be acclimatized. The best processing temperature is at 15 - 25° C, do not process below +10°C. The best moisture content of the wood is 10-15 %.

Mix KLEBIT 304.0 carefullwith 5 % weight ratio or 4 % volume ratio of the hardener. The dosage should be measured with scales or a measuring cup. For mixing use a drill with agitator blades. Single-sided application of the glue is usually sufficient. When bonding hardwood and other types of wood which are difficult to bond, two-sided application is recommended for obtaining a higher bond strength.

Application quantity:	100-180 g/m²
Open time:	4 - 6 minutes, depen-
	ding on application
	quantity and processing conditions
Press power:	0,4 - 1 N/mm²
Press times at 20°C:	20 minutes and longer
	(pine 12%/20°C)
HF press times:	45 - 120 seconds
-	(depending on thick-ness of glue line and power of the generator)

Windows and similar frame constructions may be removed from the press immediately after temporary fastening with nails. The water resistance of the bonded parts is achieved after 7 days storage at a temperature of 15° C.

Contact with iron may cause discolouring. Wood is a natural product, wood specific differences may cause discolouring in rare cases depending on trees environment.

Cleaning

Application devices, machines and containers can be cleaned with water.

Packaging sizes

KLEBIT 304.0 Glue - Comp. A: plastic pails of 9,5 kg net or 26,0 kg net KLEBIT 304.2 Hardener - Comp. B: plastic bottles of 0,5 kg net or 1,3 kg net KLEBIT 304.3 Hardener - Comp. B: plastic bottles of 0,5 kg net or 1,3 kg net

Tempo 347.0

Artificial resin dispersion glue with very short setting times. Particularly suited for fast press processing.

Fields of application

- · Bonding of laminates in a short cycle press
- Bonding of edges (cold bonding or with heated band)
- Assembly bonding and joint bonding
- Bonding of structural components
- Bonding of pilaster strips and ledges
- Post-forming, (see our separate data sheet 347.0 for post-forming)

Advantages

- Short setting time with cold and hot bonding up to 90° C
- Short open time, the glue is intended for fast press processing
- High yield

Properties of the bond

- High bond strength according to DIN EN 205
- Very high moisture resistance
- Tough-elastic glue film, gives a good tool life
- Transparent glue film

Properties of the glue

Base:	PVAC dispersion			
Specific weight:	approx. 1.08 g/cm ³			
ph-value:	approx. 5			
Colour:	white, transparent when dry			
Viscosity at 20° C - Brookfield RVT, spindle 6/20 rpm:				

	14.000 +/- 2.000 mPa·s
Consistency:	high viscosity, good
	application properties, also
	with machines
Open time:	approx. 3 minutes
Chalk point:	12°C
Identification:	identification not
	required according to
	German regulation
	GefStoffV
	(see our safety data sheet)

Application methods

- Manually with paint brush, spatula, glue roller and spray bottle
- Nozzle application device out of a pressurised container
- Glue applicator, (2 and 4 roller)

Application techniques

The materials to be bonded must be free from dust, oil and grease and acclimatized. The most favourable working temperature is at 18-20° C. The best moisture content of the wood is 8-12 %, max. 15 %. Do not process below 15° C.

Application quantity: 100-110 g/m² when applied by machine up to approx. 150 g/m² when applied with manual glueing devices

Open time: about 3 minutes. The open time is influenced by the quantity applied, the absorbability of the substrates, the moisture content of the wood, the humidity of the air and the temperature.

Press times:

- joint bonding (20° C) 3-5 minutes
- joint bonding, pre-heated on one side (70° C)
 - 1-2 minutes
- bonding of structural components (20° C)

4-5 minutes

• bonding of veneer edges (80° C)

1-1.5 minutes

• bonding of ledges (20° C)

1-3 minutes

• surface bonding, (HPL-boards) (20° C)

4-5 minutes

• surface bonding, (HPL-boards) (50° C)

1-2 minutes

- surface bonding, (HPL-boards) (60° C)
 - \geq 1 minute

Heating accelerates the setting process considerably. In case of short press times, please wait some time before further processing of the parts. Pay attention to a good joint fit.

This data provides only an approximate value and is given without obligation. It is based on a moisture content of the wood of approx. 10 % and an application quantity of glue of 100 g/m².

As the different bonding processes are influenced by various factors, exact press times must be determined your own trials to be carried out in your factory.

Cleaning

Machines, application devices and glue containers can be cleaned with water.

Packaging

KLEIBERIT Tempo 347.0:

- plastic pail, 32 kg net
- plastic barrel, 130 kg net
- disposable container, approx.1000 kg net

Storage

KLEIBERIT Tempo 347.0 can be stored at 20°C for approx. 1 year in factory sealed containers. Due to its special field of application, it is recommended that the glue be protected from frost.

KLEBCHEMIE M. G. Becker GmbH + Co KG • P.O.Box 1204 • D-76353 Weingarten tel. +49 7244 620 • fax +49 7244 7000 • E-Mail info@kleiberit.com, <u>http://www.kleiberit.com</u>

Storage

Both components can be stored in factory sealed containers at 5 - 25° C for about 6 months. The glue should be transported and stored frost-protected. Storage over a temperature of 25°C may change viscosity.

EX 0497, replaces previous data sheets

EX1298, replaces previous data sheets

KLEIBERIT PRODUCT SHEET

Product Code	Purpose	Application Temp./ press times	Properties
303.2	Cold pressing/ Hot Pressing of HPL/Veneer on MDF/PB Very high standard D-3 Glue	20 degree celcius / 90 mins. 40 degree celcius / 60 mins. 80 degree celcius / 03 mins. 110 degree celcius / 02 mins.	PVAC dispersion
332.0	Hot pressing of HPL/Veneer on MDF/PB. Long Open time. D2 Glue	60 degree celcius / 5- 6mins. 80 degree celcius / 4-5 mins.	PVAC dispersion
788.7	Very High Bond strength Hotmelt for Manual Machines. Very high strength on curvilinear edges.	140-170 degree celcius	EVA- copolymer
773.3	Very High Bond strength unfilled Glue for throughfeed edgebanding	180-200 degree celcius	EVA- copolymer
453.0	Cold setting EVA glue for bonding PVC edgebands on MDF/ PB	Room Temperature	EVA- copolymer
779.6	General purpose High Grade Hotmelt for throughfeed edgebanding suitable for even thick veneers and solid Wood edgebanding, apart from PVC and ABS.	190-210 degree celcius	EVA- copolymer
436.2	One/ two component laminating dispersion for deep drawing, membrane, multiform pressing as well as for Hot sealing (+ 5% hardener 807)	80 degree celcius / 5-6 mins. 90 degree celcius / 3-4 mins. 120 degree celcius / 90 sec.	Polyurethane Dispersion

KLEBCHEMIE M. G. Becker GmbH + Co KG • P.O.Box 1204 • D-76353 Weingarten tel. +49 7244 620 • fax +49 7244 7000 • E-Mail info@kleiberit.com, <u>http://www.kleiberit.com</u>