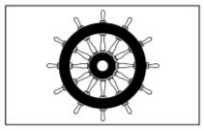
KLEIBERIT 501.0

1C PUR Adhesive

Fields of application

- Manufacture of wall elements and other non-load-bearing structures made of wood and wooden materials
- Manufacture of wood products that are exposed to the weather, such as windows, doors, fence elements and terrace components, each with a suitable surface protection
- Adhesion of wooden products and elements that are subject to high loads or are temporarily exposed to increased moisture, such as Parquet flooring, sauna and bathroom furniture
- Bonding of mineral building boards, ceramic and concrete materials and hard foams
- Bonding in shipbuilding
  Approval No.: 118229-04



- Does not violate any of the Minergie-ECO exclusion criteria

Advantages

- Single-component adhesive, no pot life problems
- Easy application

Properties of the bond

- The glue joint is resistant to high temperatures
- Bond quality D4 according to DIN EN 204 (See AIDIMME Test Certificate No. 221.S.2510.1133.DE01 dated 08.01.2026)
- Tested according to DIN EN 14257 (Watt 91) (See AIDIMME Test Certificate No. 221.S.2510.1133.DE01 dated 08.01.2026)

Properties of the adhesive

Base: Polyurethane

Restricted to professional users

Colour:	brown
Specific gravity:	approximately 1.13 g/cm³
Viscosity at 20°C	
- Brookfield RVT:	7,000 ± 1,500 mPa s
Consistency:	thin liquid
Identification:	see our safety data sheet

Application techniques

Processing conditions:

The substrates to be bonded have to be tempered to at least 18 °C room temperature.
The substrates must be clean, dry and free from grease.
At wood-based materials the material moisture shouldn't be below 5 %.
Remove release agent from the substrates to be bonded if present.
Do not process KLEIBERIT 501.0 below +5°C.

Application methods:

The application can be done with spatula, roller or nozzle equipment.

Application:

Single-sided application suffices on less porous surfaces

Application quantity:

100-200 g/m² according to the condition of the material
Certified application quantity in shipbuilding: 150 g/m²

Open time:

Approx. 20 - 25 minutes at approx. 20 °C and 50 % relative humidity. This period is reduced by high room temperatures, high humidity or the supply of moisture.

Setting:

The adhesive hardens to a water-resistant, solvent-resistant and semi-rigid adhesive film when exposed to humidity (from the air or materials being bonded).
The cross-linking process can be accelerated by means of targeted moisture supply (water spray, approx. 20 g/m²) or by higher temperatures (40°C up to max. 80°C).

Pressing the parts:

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The cross-linking process takes place when sufficient pressure is applied to ensure contact with the surfaces to be bonded. The necessary pressure is dependent on the kind and size of the materials; a good joint fit should be ensured. Minimum pressure for the bonding of laminated wood: **0.6 N/mm²**. The more intensive the cross-linking of the adhesive under pressure, the higher the subsequent loading ability.

Press times:
The press times are dependent on temperature and moisture supply.
Guide values:

Temp.	Press time
20 °C	from 60 minutes
40 °C	from 30 minutes
60 °C	from 10 minutes
80 °C	from 5 minutes

Exact times must be established for the particular application according to the conditions in question.

Final setting time:
Subsequent processing of the bonded parts is possible after approx. 2 -3 hours, final strength is achieved after approximately 24 hours.

Further information as per our information sheet KLEIBERIT 501

Cleaning
Clean application tools with KLEIBERIT 820.0 **immediately** following use.

Packaging

KLEIBERIT 501.0:
metal can, 6 kg net
metal can, 32 kg net
carton with 12 plastic bottles, 0.5 kg net
Cleaner
KLEIBERIT 820.0:
metal can, 4.5 kg net

Additional packaging available upon request.

Storage
KLEIBERIT 501.0 can be stored in closed air-tight plastic bottles without aluminium bag at 20°C for approx. 9 months. KLEIBERIT 501.0 in all other air-tight containers at 20°C for approx.. 12 month. Keep in a cool and dry place and carefully protect from humidity. Opened containers should be used up as soon as possible.
KLEIBERIT PUR Adhesive 501.0 is not frost sensitive at temperatures above -25°C.

Version 08.05.2026 al; replaces previous version

Adhesive and Waste Disposal

Waste Code 080501

Our containers are made of recyclable material. Well drained containers can be recycled.

Service
Our application department may be consulted at any time without obligation. The statements made 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.

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