



# KLEIBERIT 501

One component, polyurethane adhesive for very strong bonds with high temperature resistance and water resistance according to DIN/EN 204 stress group D4.



## Bonding in Shipbuilding

(according to IMO FTPC Part 5 & Part 2/ Approval per BG Verkehr (Dienststelle Schiffsicherheit) test certificate for international use according to Module B). Certified application quantity: 150 g/m<sup>2</sup>

Adhesive for water resistant bonding according to **DIN/EN 204**

**D4**



**The handy bottle with the patented dispensing lid.**

- self cleaning
- easy to dispense
- precise adhesive application



**KLEIBERIT 501** is a single component PUR adhesive for strong bonds with high temperature resistance according to DIN/EN 14257 (WATT 91) and water resistance according to DIN/EN 204 stress group D4.

**FIELDS OF APPLICATION**

Bonding windows and doors, stairs, plywood to be used inside or outside (outside use with surface protection). Bonding mineral building boards, ceramic materials, concrete materials and hard foams.



Please see warnings on the bottle before using!

**PREPARATION**

The surfaces to be bonded must be climatized, clean, dry and free from dust and grease. Release agents must be completely removed.

**APPLICATION**

- Single-sided application using a spatula or hand roller to the surface which is least porous
- Assemble the two pieces to be bonded
- The product cures to a water-resistant, solvent-resistant and semi-rigid adhesive film when subjected to the influence of humidity (air, material). The cross-linking process can be accelerated by means of a targeted moisture supply (fine water spray, approximately 20 g/m<sup>2</sup>), or by higher temperatures (40 °C up to max. 60 °C).
- The cross-linking process should take place with a pressure that guarantees sufficient contact of the glued surfaces. In order to protect exposed surfaces from being contaminated with glue, apply e.g. a silicone paper to this area.
- The necessary pressure is dependent upon the type and size of materials. A good closed joint should be achieved. Minimum pressure for bonding laminated wood: 0.6 N/mm<sup>2</sup>. The more intensive the cross linking of the adhesive under pressure, the higher the subsequent load ability.

**PROPERTIES OF THE ADHESIVE**

- **Base:** polyurethane
- **Specific gravity (20 °C):** approx. 1.13 g/cm<sup>3</sup>
- **Consistency:** see table
- **Temperature:** +20 °C ideal, not below +5 °C
- **Wood moisture:** ideal for interior between 8-10% for exterior between 10-14%
- **Coat weight:** 100-200 g/m<sup>2</sup>  
Depending on the condition of the material
- **Open time:** see table
- **Press time:** see table
- **Curing time:** see table
- **Final strength:** after approx. 24 hours with sufficient moisture
- **Colour:** brown

**CLEANING**

Clean application tools with **KLEIBERIT 820.0** immediately after use.

**ADHESIVE AND PACKAGING DISPOSAL**

Disposal code 080501

**PACKAGING**

metal canister	501.6	5 kg net
metal canister	501.0 and 501.8	6 kg net
metal can		32 kg net 0.5 kg net each
carton containing 12 plastic bottles		

**Cleaner**

**KLEIBERIT 820.0:**

metal canister	4.5 kg net
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Additional packaging sizes available upon request.

**STORAGE**

**KLEIBERIT PUR glues** can be stored in original factory sealed containers at 20 °C for: **KLEIBERIT 501.0** approx. 9 months, **KLEIBERIT 501.6** for approx. 12 months and **KLEIBERIT 501.8** for approx. 6 months. Keep in cool and dry place and protect from humidity. Opened containers should be used as soon as possible. **KLEIBERIT PUR glues 501.0 and 501.8** are not frost sensitive at temperatures above -25 °C, **KLEIBERIT 501.6** at temperatures above -20 °C.

EX 03/18; replaces previous versions

**IDENTIFICATION**

identification required according to EU regulations, contains 4.4' di-phenylmethane-diisocyanate. See our safety data sheet **501.0, 501.6, 501.8**. For professional use only.

**Product Overview KLEIBERIT 501**

KLEIBERIT Products	D4	Watt 91	Viscosity at 20 °C (mPa·s)	Open time (approx. 20 °C, 50% rh)	Minimum press time			Curing time
					(20 °C)	(40 °C)	(60 °C)	
<b>KLEIBERIT 501.0</b>	x	x	7,500 ± 1,500	approx. 20-25 min	from 60 min	from 30 min	from 10 min	approx. 2-3 hours
<b>KLEIBERIT 501.6</b>	x	x	7,000 ± 1,500	approx. 70 min	6-7 hours	2-3 hours	1-2 hours	1 day
<b>KLEIBERIT 501.8</b>	x	x	7,000 ± 2,000	approx. 10 min	from 30 min	from 15 min	from 7 min	approx. 1 hour

Exact times for the particular application must be determined according to the conditions present.

**TECHNICAL DATA**

**KLEIBERIT 501  
1C PUR Adhesive**



**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.