



# PUR 501

**Moisture curing single-component reactive adhesive, based on polyurethane, highly resistant to water and temperature, D4 according to DIN EN 204.**

## Fields of application

- Bonding of windows and doors, e.g. laminating of windows and joint bonding of doors
- Laminate bonding of wood and wood materials
- Joint bonding for outdoor use
- Joint bonding of MDF boards
- Bonding of mineral building boards
- Bonding of ceramic materials, concrete materials and hard foams

## Advantages

- Single-component
- No pot life problems
- Easy application
- Relatively short curing times

## Properties of the bond

- The thermal setting glue joint is extremely resistant to high temperatures and achieves highest bonding strength
- Excellent weather resistance
- Bonding quality D 4 according to DIN EN 204

## Properties of the adhesive

<b>Base:</b>	isocyanate
<b>Color:</b>	yellowish-brown
<b>Specific gravity:</b>	approx. 1.13 g/cm <sup>3</sup>
<b>Viscosity</b>	
<b>(Haake VT 180 @ 20°C):</b>	8,000 ±1,000mPas
<b>Consistency:</b>	medium viscosity
<b>Identification:</b>	identification required according to the German hazardous substances regulations GefStoffV, contains 4.4 diphenyl methane diisocyanate (see our safety data sheet)

## Application techniques

### Processing conditions:

The ideal working temperature is +20°C, the ideal moisture content of the wood 8-12 %.  
Do not process below +5°C.

The adherents must be clean, dry and free from grease. Remove release agent from plastic surfaces.

### Application methods:

spatula  
hand roller  
plastic squeeze bottle  
special dispensing apparatus

### Application:

single-sided application to the surface which is least porous

**Application quantity:** 100-200 g/m<sup>2</sup>

### Open time:

20-25 minutes at approximately 20°C. High temperatures, high humidity or moisture supply reduce this period.

### Curing:

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 (50°C up to max. 70°C).

## Application techniques (cont.)

### Pressing/clamping:

The cross-linking process should take place with a pressure that guarantees sufficient contact with the adherent. The necessary pressure is dependent upon the type and size of materials. A good fit should be achieved. Minimum pressure for the bonding laminated wood: **0,6 N/mm<sup>2</sup>**. The more intensive the wetting of the adhesive under pressure, the higher the subsequent load.

### Press times:

The pressing times are dependent upon temperature and moisture supply.

20°C approximately 60 minutes

40°C approximately 30 minutes

60°C approximately 10 minutes

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



## PUR 501

### Final setting time:

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

### Safety measures:

Harmful when inhaled. Irritating to eyes, respiratory system and skin. May cause sensitisation following inhalation and skin contact. In case of contact with eyes, rinse with plenty of water immediately and seek medical advice. After contact with skin, wash immediately with plenty of water and soap.

In case of insufficient ventilation or flame scraping, wear suitable respiratory equipment. If you feel unwell, seek medical advice. Heating up to more than 40°C causes harmful vapours, therefore ensure effective ventilation, or wear respiratory equipment in rooms which are not sufficiently ventilated. The adhesive reacts chemically with water, therefore contact with eyes, mouth or mucous membranes should be avoided at all means.

### Cleaning

Clean application tools with KLEIBERIT Cleaner C820 or trichlorethylene immediately after use. Hardened adhesive must be mechanically removed.

### Packaging

KLEIBERIT PUR Adhesive 501:  
cartons containing 12 plastic bottles, 0,5 kg each  
metal bucket, 8.0 kg net

### Storage

KLEIBERIT PUR Adhesive 501 can be stored in factory air-tight closed containers at 20°C for approx. 9 months. Keep in cool and dry place and protect from humidity. Opened containers should be used as soon as possible.

EX 0300

#### Waste Disposal

Disposal of contents and/or containers should comply with all applicable federal, state and local regulations.  
Our containers are made of recyclable material.

#### 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.