

## Express PU

Properties	Value	Unit	Method / Remarks
	System		
Chemical Base	1K-Polyurethane		
Solvent	without		
Consistency	medium viscous - pasty		
Density, mixture	1,5	g/ml	+20 °C, EN 542
Color, cured adhesive	beige		
Temperature resistance	-40 to +110	°C	cured adhesive
Storage temperature range	+15 to +25	°C	
Shelf life	15	months	while storage viscosity increases
	Handling		
Minimum Processing Temperature	0	°C	environment
Cartridge Temperature	minimum +15	°C	
Tack free time, dry	3	min	+20 °C and 50 % R.H.
Tack free time, wet	1,5	min	+20 °C, wetted with water
Functional after	10	min	depending on application at +20 °C
End fast after	24	h	+20 °C and 50 % R.H.
Application Quantity	approx. 150 - 300	g/m <sup>2</sup>	depending on substrate

### Application

Express PU is a solvent-free, gap-filling universal applicable polyurethane mounting adhesive with fast response time and tough adhesive joints. Express PU is applicable for various uses in building trade such as window and stair construction, as well as in the assembly area and miscellaneous other industrial sectors. Express PU excellently adheres on different wood and construction materials, ceramics, metals, thermosets and thermoplastics with adequate pretreatment. Express PU achieves stress group D4 according to DIN EN 204 and a resistance to thermal distortion according to DIN EN 14257 (WATT 91) > 8 N/mm<sup>2</sup>.

**Properties / Features**

- Highest adhesive strength and stability
- Hardens quickly - tack-free in approx. 5 minutes
- May be sanded and coated
- Fills in gaps, expands slightly upon hardening
- Does not drip, suited for vertical and overhead surfaces

**Directions for use**

The surface of the substrates has to be dry, free of dust and grease. In case form release agent has to be removed. Dependent of the materials and the surface appearance the adherend should be grinded. Express PU is applied as adhesive bead to one side of the assembly parts.

For bonding non-sucking materials, note the following:

In order to achieve a complete curing joint the two parts (both surfaces are coated), separate them again and moisten the surfaces with water.

The assembly parts are joined within the tack free time (after wetting max. 1.5 min) and they should be pressed until achievement of the functional strength.

Express PU slightly expands during the curing process. In order to avoid bubble forming the substrates are to be compressed during curing. After curing Express PU is grindable and paintable. To note: The viscosity of 1-K-PU-adhesives is at +15 °C about twice as high as at +25 °C. The adhesive changes its colour by sunlight, but the stability persists.

Bonding of aluminium: Only at chemically pretreated or coated surfaces. Bare aluminium could not be permanently non-ageing adhered without appropriate pretreatment. Joining of materials with different linear expansions should be evaluated regarding their long-term behavior especially in varying temperature ranges. During the bonding of solid wood the pressure should be possible > 1N/mm<sup>2</sup>.

**Cleanup**

Before hardening - with acetone, after - mechanical cleaning.

**Storage**

Store at room temperature.

**Additional information**

Classified according to GEV criteria in EMICODE class EC1PLUS.

For further safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

The information in this adhesives brochure and our application-technology consulting, verbally and in writing, is given to the best of our knowledge, but is non-binding and is not a guarantee in the sense of § 443 BGB. We recommend that, before using our products, you check the suitability for the intended application. As the individual product can be used for a wide range of applications and the conditions on site that cannot be estimated, we also recommend testing the bonding before using the product.