

## TECHNICAL DATA SHEET – OCTOBER 2013

### Rakoll® GXL3P

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#### Rakoll® GXL3P One-Component D3 PVA Adhesive

##### Characteristics

Rakoll® GXL3P is a PVA glue with water resistance, which meets D3 requirement according to EN 204. GXL3P sets quickly. The set glue joints are very strong and have a good resistance to high temperature. When catalysed, GXL3P exceeds the D4 requirements according to EN 204.

##### Fields of application

- Moisture resistant gluing of windows, doors and stairs according to EN204/D3.
- Surface bonding of decorative papers.
- High frequency bonding.
- Stationary edge gluing with veneers, plastic laminates and solid wood stripe.
- Surface bonding of decorative high pressure laminates in short-cycle press.
- Cabinet and assembly bonding with medium pressing times and preheating devices.
- Board joint and block gluing of softwood, hardwoods and chipboards

##### Instructions for use

The open assembly and setting times largely depend upon the working conditions such as temperatures, moisture, absorbency of materials, glue spreads and tensions of the materials.

Good results are obtained under the following conditions:

Stir well before use	
Room, material and glue temperature	18 - 20 °C
Wood moisture	8 - 10 %
Relative humidity	60 - 70 %
Glue spread: for surface bonding	80 - 140 g/m <sup>2</sup>
for assembly bonding	160 - 180 g/m <sup>2</sup>
Open assembly time for 150 g/m <sup>2</sup>	8 - 10 min.
Pressure depending on type of gluing	0.1 - 0.8 N/mm <sup>2</sup>
Minimum pressing times:	
Surface gluing of decorative papers	from 10 sec.
High frequency gluing with longitudinal heating	from 20 sec.
Surface gluing of high-pressure laminates in short-cycle presses (+70°C)	from 60 sec.
Assembly bonding	30 mins.
Board joint and blocks bonding	45 mins.

##### Chemical - technical data

Base	PVA Dispersion
Colour	white
pH-value	2.7 – 3.7
Chalk point	+ 3°C
Viscosity(#5/10rpm/20 °C)	9,300 – 13,500 cP
Total solids	48-50%



##### Caution

Since the required ultimate performance, the substrates used and the production techniques differ, it is essential that this product is fully evaluated under both end use and production conditions before commercial production is embarked upon. Ageing characteristics of the bond should also be considered. If changes in substrates or production conditions occur re-evaluation may be required.

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#### Preparing the wood

The parts should fit exactly and be free from dust and grease. Variations in thickness cause prolonged setting times and reduced bond strength.

#### Application of glue

Apply Rakoll® GXL3P in a thin and uniform coating to one surface. If higher water resistance is required, apply to both surfaces. Rakoll® GXL3P can be applied using glue spreaders, glue rollers, notched trowels, brushes or other appropriate tools.

#### Pressing

Join the parts within the open assembly time and press until a sufficient initial strength is obtained. The pressure should be as high as necessary to ensure a close contact between the surfaces to be bonded. The mechanical strength needed for the subsequent treatment of the part is, depending on material and type of bonding, achieved in a short time. Since the higher water resistance of the glue joints develops more slowly, it should be tested 7 days after gluing.

#### Discolouration of wood

Rakoll® GXL3P does not cause any discolourations. Iron, however, can react with the tannin in wood, especially oak, and produce a dark stain.

#### Cleaning

Clean the application tools with water before the glue starts to dry.

#### Safety recommendations

Refer to MSDS.

#### Storage

Store adhesive in tightly closed original containers out of direct sunlight between 10 – 35°C. Protect from frost. Best results are achieved when the adhesive is used within 6 months of manufacture.



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