

## Rakoll® ECO 3

- Type of Product** PVAc adhesive, meets the requirements of class D 3 as a one-component product, standard DIN EN 204.
- Product Characteristics**
- excellent water resistance
  - sets very quickly
  - if heat is applied, you can shorten the pressing time
  - the bonded joints are characterised by a good high-temperature resistance
- Typical Applications** This product can be used for a variety of applications including:
- surface gluing of veneer film
  - high-frequency bonding
  - surface bonding of HPL/CPL in short cycle presses
  - carcass and assembly gluing
  - bonding joints in boards and block gluing of
  - softwoods and chipboard as well as hardwoods
- Suitable substrates** Wood and wood materials.

### Typical Properties

Property	Value
Base	PVA dispersion
Colour	white
pH	approx. 3
White point	6°C
Viscosity (Brookfield HB, Sp3, 20rpm, at 20°C)	approx. 11 500 mPa.s
Shelf life	9 months

**Application Instructions**      Open time at 150 g/m<sup>2</sup>: 9 – 10 minutes

The open time and setting time depend strongly on working conditions such as temperature, humidity, absorbency of the materials being worked, and amounts applied.

Good results will be achieved if the following conditions are observed:

- Room, material and adhesive temperature: 18°C – 20°C
- Moisture content of the wood: 8 – 10%
- Relative humidity: 40 – 60%

Amounts of adhesive to apply:

- for surface bondings: 70 – 150 g/m<sup>2</sup>
- for assembly gluings: 150 – 190 g/m<sup>2</sup>

Press pressure, depending on type of bonding: 0,1 – 0,8 N/mm<sup>2</sup>

Minimum pressing times:

- surface gluing of veneer film in short cycle presses:  
45 seconds at +70°C
- high-frequency bonding with longitudinal heating:  
from 15 seconds

Surface gluing of HPL/CPL in short cycle presses at 70°C: from 60 seconds

Assembly gluings: 8 – 15 minutes

Boards and block gluing: 10 – 15 minutes

**Pot-life:** approx. 24 hours at normal temperature.

Temperatures above +20°C reduce the pot-life.

**Wood preparation:**

All parts should mate well and be dust and grease free. Over tolerances will lead to longer setting times and weaker bonds. The joints should be cut shortly before bonding.

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**Application Instructions****Wood preparation:**

All parts should mate well and be dust and grease free. Over tolerances will lead to longer setting times and weaker bonds. The joints should be cut shortly before bonding.

**Applying the adhesive:**

Apply Rakoll® ECO 3 thinly and evenly to one side or, if a high degree of water resistance is required, to both sides, using a spreading machine, glue roller, serrated trowel, glue brush or another suitable device.

**Pressing:**

Lay the items to be bonded together within the workable time and press for as long as is needed to achieve initial firmness upon release. The pressure should be high enough to ensure contact of the parts over the entire area of the joint. Depending on the material and the type of bond being used, the mechanical firmness required for further processing of the parts is achieved within the shortest possible space of time. The higher levels of water resistance form more slowly and should be tested not earlier than 7 days after bonding.

**Wood discoloration:**

Because of the varied nature of wood components, e.g., depending on the area of growth and the type of pre-treatment, unpredictable discoloration may in some cases appear on different types of wood, such as beech, cherry and others.

In addition, it is possible that iron together with the tannin in wood can cause discoloration, especially in the case of oak.

We recommend you test this for yourself.

Rakoll® ECO 3 can thicken a little after pro-longed storage. The adhesive should then be thoroughly mixed and is then ready for use again.

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<b>Cleaning Instructions</b>	Clean machines and utensils with water before the adhesive dries.
<b>Typical Packaging</b>	Please contact your local Sales Office for available packaging options.
<b>Storage Conditions</b>	Store Rakoll® ECO 3 away from frost in tightly closed original containers between +5°C and +35°C.
<b>Disposal Advice</b>	Please refer to the MSDS for disposal instructions.
<b>Safety Advice</b>	Please refer to the MSDS for safety advice.

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