



Rakoll® ECO 3

- Type of Adhesive** PVAc adhesive, meets the requirements of class D 3 as a one-component product and mixed with Rakoll® GXL-3-Härter meets the requirements for D 4 standard DIN EN 204.
- Product Benefits**
- 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 decor-finish 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
Rakoll® ECO 3	
Base	PVA dispersion
Colour	white
Viscosity	approx. 13.000 mPa.s (Brookfield HB, Spindle 3, 20 rpm, 20°C) on the day of production
White point	6 °C
pH-value	approx. 3
Shelf life	9 months
Rakoll® GXL-3-Härter	
Base	polyisocyanate
Colour	colourless
Mixture	
Colour	white
Viscosity	approx. 11.500 mPa.s (Brookfield HB, Spindle 3, 20 rpm, 20°C) on the day of production
White point	6 °C
pH-value	approx. 3



Application Instructions

The open time and setting time depend strongly on working conditions such as temperature, humidity, absorbcency 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 – 20°C
- Moisture content of the wood: 8 – 10%
- Relative humidity: 60 - 70%
- Amounts of adhesive to apply:
 - for surface bondings: 70 - 150 g/m²
 - for assembly gluings: 150 - 190 g/m²
- Press pressure, depending on type of bonding:
0,1 - 0,8 N/mm²
- Minimum pressing times:
 - surface gluing of decor-finish film in short cycle presses:
5 – 10 sec
 - high-frequency bonding with longitudinal heating:
from 15 sec
- Surface gluing of HPL/CPL in short cycle presses at 70 °C:
from 40 sec
- Assembly gluings: 8 - 15 min
- Boards and block gluing: 10 - 15 min

Laminating of wooden window profiles:

In accordance with the Quality Guidelines of i.f.t. Rosenheim, "Laminated Profiles for Wooden Windows", the wood moisture content must be 13 +/- 2%. The room temperature and the wood temperature must be at least 15°C.

Mixing ratio

100 parts by weight Rakoll® ECO 3 with 5 parts by weight Rakoll® GXL-3-Härter. Mix the adhesive and the hardener together thoroughly.

Pot life

Approx. 24 hours at normal temperature.

Temperatures above +20°C reduce the pot life.



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 discolouration

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.



H.B. Fuller



TECHNICAL DATA SHEET

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

Our Focus is Clear. Perfecting Adhesives.

IMPORTANT: The information, specifications, procedures and recommendations herein (together "information") are based on our experience and we believe these to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that the information will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

NOTE TO USER: by ordering/receiving product you accept the H.B. Fuller General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received these. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms are rejected. In any event, the total aggregate liability of H.B. Fuller for any claim or series of related claims however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill or any indirect or consequential losses arising out of or in connection with product supply.

Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence or for death or personal injury caused by negligence or for breach of any mandatory implied terms.



H.B. Fuller

H.B. Fuller Company

info-europe@hbfuller.com
www.hbfuller.com/
eimea/contact-us