

PURPEKS 401 NATUR

Product Information:

PURPEKS 401 NATUR is a Reactive Polyurethane Hot Melt adhesive for Edgebanding, Straight line, and soft forming applications.

Appearance

Blocks in aluminum laminated flexible packaging (peelable bag)

At a Glance

- Reactive hotmelt adhesive system based on polyurethane
- High initial strength
- Chemical cross-linking within few days
- Forms an insoluble, thermoset film
- High final bond strength
- Very high heat resistance (> 150 °C) and cold flexibility
- Excellent water resistance
- Produces tight joints
- Clean working
- Particularly suitable for nozzle application

Technical Data

Softening Point, Kofler ~75°C
Viscosity, Brookfield 150 °C ~80.000±20.000

Heat Resistance >150°C
(*) Tested with 0.6 mm oak veneer using the method of increasing temperature.

Application Areas

- Edgebanding as from feedrates of 15 m/min
 - Edging material: veneer, melamine, polyester, HPL*, PVC*, ABS*, PP*
- (*Suitability depends on the individual characteristics of the edging material and how it is primed. In case of thick edges pre-tests should be carried out for suitability).

Recommended Working Temperature

In the melting container 120 to 140°C
At the application roller 120 to 140°C

Recommended Application Amount

wood materials, depending on substrate to be bonded
50 - 90 g/m²

Substrate Temperature

Foil temperature has to be 15-35°C and the profile has to be preheated at least at 40°C just before the first pressing roller in order to achieve the best wetting of the surface.

Curing

The initial bond strength is sufficient to keep the two substrates bonded together. Nevertheless, the final bonding strength and resistance is achieved after the full curing of the adhesive which depends on substrate and environment humidity.

Storage

Store in a cool, dry place in the unopened original container for up to 12 months. (2 kg container for up to 9 months).

Packaging

2 kg / 20 kg block in aluminum laminated flexible packaging, in cardboard or metal drums.
190 kg in aluminum laminated flexible packaging in metal drums.

Cleaning

Flushing the system with PURPEKS-CLEANER periodically or prior to changing to an alternative reactive hot melt will reduce internal build-up of adhesive residue. Application devices such as wheels and rolls that expose reactive adhesive to the air should be thoroughly flushed at the end of a production run or at any time when there is buildup and gelling. We recommend for the cleaning of the application equipment's PURPEKS-CLEANER. When working with the cleaning agent's safety instructions must be considered. Follow also strictly the instructions of the machine manufacturer.

Processing

Reactive hotmelt adhesives have a limited thermal stability even when working at the specified working temperatures; therefore, we recommend that after a period of 4 hours without production, that the unit is either switched off, or the set temperatures on the unit be reduced to 60°C. Since the product will cure when it is exposed to moisture, storage and application must be done under dry conditions. For this reason, the product is delivered in airtight containers.

Safety

The product contains diphenylmethanedisocyanate. Even if the product is applied within the range of the recommended working temperature, the diisocyanate has a detectable vapour pressure. When the recommended working temperature is considerably exceeded, hazardous decomposition products may be formed in the application unit; therefore, measures to draw off the vapours need to be taken, e.g. through the provision of extraction equipment. In case of skin contact with the hotmelt, do not try to remove the adhesive from the skin by force. Consult a doctor. Observe the material safety sheets.

Disclaimer:

The statements listed on this publication are according to our best knowledge. The statements do not exonerate the user from their own responsibility to determine that our products are suitable for their processes. They are intended to inform and advise and are subject to influence from the technical process.
This edition of September 22, 2026 replaces all previous editions. With the present edition all older editions are null and void.

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