

# Technical Information

## Frimpeks PU Hotmelt Adhesives

102303 PEKS PUR 100.40.50

### Product Information:

102303 is a Reactive Polyurethane Hot Melt adhesive which cross-links through air moisture.

### Typical End Use & Properties

Designed for surface covering and profile wrapping ABS/PMMA, PVC, CPL, PET on aluminum MDF, chipboard and wood derivate profiles.

### Application Methods

Slot Nozzle/Roller

### At a Glance

High viscosity product  
High initial strength on shape substrates  
Excellent water resistance  
Excellent heat and cold resistance

### Technical Data

Aspect	Solid
Color	White/Light amber
Solid Content	100%
Viscosity Brookfield @ 140°C	20.000 - 40.000 cp

Density (g/cm <sup>3</sup> ):	approx. 1.02
Open Time, 120°C (s)	50 - 120
Setting Time, sec	7 - 10
Curing Time, days	3 - 7

(\*) Typical properties, not to be used as specification

### Recommended Application

The product has to be applied using specific equipment designed for Reactive Polyurethane Hot Melt: Melting unit (Teflon coated tanks), thermoregulated hoses and application slot nozzles or roller coater. The adhesive in the melting tank should be kept under nitrogen or dry air in order to avoid the deterioration and/or the anticipate curing.

### Machine Temperature set

Melter	120 - 130°C
Feeding hoses	120 - 130°C
Application unit	130 - 140°C

### 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.

### Dosage

MDF and ALU	40 - 60 g/m <sup>2</sup>
Wood	70 - 90 g/m <sup>2</sup>
PVC and PMMA	35 - 55 g/m <sup>2</sup>

### 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

The product, stored in the well-sealed, original, containers at temperatures between 5°C and 35°C, is stable for one year. Accurately protect against humidity.

### 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 June 14, 2023 replaces all previous editions. With the present edition all older editions are null and void.

### Cleaning

The product contains free NCO groups that react with environmental moisture forming gels and then infusible polymer. Application equipment, such as rollers or slot nozzle where adhesives is in contact with air must be cleaned with CLEANER at the end of each working day, or anytime the line is stopped for more than 30 minutes. As long as the polyurethane reactive adhesive is not cross-linked, it can be removed using organic solvents, as well as by means of non-abrasive spatulas. Follow the instructions of the equipment supplier.

### Recommendations

In adverse conditions, inks, additive and coatings, as well as other components, may react with the adhesive leading to unforeseen irregularities in laminate quality, even after some time from the manufacturing. Therefore, before starting industrial production, it is recommended to perform adequate tests to check the suitability of the adhesive system for the type of structure, as well as for the required final results. Our Technical Support service is available for providing you with all the assistance and information you might need for the correct use of our adhesive system. Use suitable personal protective equipment during application and refer to relevant SDS for additional safety instructions.

### Packaging

20 kg block in aluminum laminated flexible packaging, in cardboard or metal drums.  
200 kg in aluminum laminated flexible packaging in metal drums.