

## PURPEKS LPU Adhesives

### PURPEKS 3200.45

#### Product Information:

PURPEKS 3200.45 is a solvent-free moisture curing one component adhesive based on polyurethane. At room temperature and the required humidity in the joint sufficient strength will be obtained after approximately 2 to 4 hours.

For faster curing, the product can be cured in a heated press. Maximum temperature must not exceed 70°C.

#### Typical End Use & Properties

The product is used for the manufacture of sandwich elements with porous substrates (e.g. wood) which contain humidity. The substrates can be bonded to one another or to metals, laminated panels, various plastics, rigid foams made of polystyrene, polyurethane and others.

#### Product Properties

Technology	Polyurethane
Product Type	PU Adhesive
Cure	Moisture cure
Condition	Solvent-free
Components	One-component
Application	General assembly
Color	Brown

#### Technical Data

Consistency	liquid	Consumption	100 to 200 g/m <sup>2</sup>
Density	1.1 to 1.2	Tensile shear strength at -40°C	>7 MPa
Viscosity Brookfield @ 25°C	3.000 - 5.000 mPa.s	Tensile shear strength at 20°C	>6 MPa
Open Time, at 23°C, 50% rh	60 to 80 min	Tensile shear strength at 80°C	>3 MPa
Initial setting time	140 to 240 min	EN 1465 (wood / wood bonding)	
Final setting time (23°C)	1 day	Service Temperature	-40 to 80°C
(*) Typical properties, not to be used as specification		Short exposure (up to 1 h)	100°C

#### Application Areas

The product is used for the manufacture of sandwich elements with porous substrates (e.g. wood) which contain humidity.

The substrates can be bonded to one another or to metals, laminated panels, various plastics, rigid foams made of polystyrene, polyurethane and others.

#### Pretreatment

The substrate should be clean, dry, free of dust, oil, grease and other contaminants. The usage of suitable primers on metal surfaces can improve the adhesion and/or the long-term bond stability. The surface of plastic materials should be cleaned, so as to remove any kind of release agents present on the substrate surface. An improvement of the adhesion can be achieved by grinding or sandblasting the surface.

#### Storage

When properly stored in a cool, dry location, with the container tightly closed when not in use, this product will have a shelf life of at least 9 months. Recommended Storage: 15°C to 25°C. Storage below 10°C or greater than 50°C can adversely affect product properties. The product is frost-sensitive.

#### Packaging

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

200 kg in aluminum laminated flexible packaging in metal drums.

#### Cleaning

Fresh, uncured material (cleaning application equipment, substrate contamination etc.) can be removed with the PUR-CLEANER; cured adhesive can only be removed mechanically.

#### Application

Application Temperature : 10 to 35 °C.

The product is applied to the substrate by spatula or doctor blade, but can also be applied by spraying or rolls. When bonding substrates without sufficient humidity or which are not moisture permeable, the required amount of moisture has to be provided by other methods. A proven procedure is the combined spraying of the adhesive simultaneously with water in a fine mist. In the case of separate adhesive and water mist application, the water must not be sprayed onto the bare metal but on the other substrate or ideally on the adhesive. Bonding surfaces should be brought together immediately after adhesive application, assuring sufficient contact pressure while curing, preferably in a press. Since The product cures by reaction with humidity, open containers must always be properly sealed and protected against moisture immediately after taking out the quantity needed. For the same reason we recommend to use up opened containers as soon as possible.

#### 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 December 7, 2023 replaces all previous editions. With the present edition all older editions are null and void.

#### Frimpeks Kimya ve Etiket Sanayi Ticaret A.S.

Velimeşe Organize Sanayi Bölgesi Mah. 236.sok. No:7/1 Ergene - Tekirdağ/ Turkey  
T +90 282 674 5200 - frimpeks.com - regulatory@frimpeks.com