

Rakoll® 4655

General Properties

Technology/Base	Polyurethane (PU), prepolymer
Type of Product	Reactive hot melt
Curing	Moisture curing hot melt
Parts	One part system
Fields of Application	Woodworking Durable assembly Composites Furniture manufacturing
Typical Applications	Flat lamination Profile wrapping All-purpose laminations
Product Benefits	High thermal stability after complete cross-linking High initial bonding strength Clean running Short open time Fast setting Good adhesion to a variety of substrates Good solvent resistance

Typical Technical Data

General

Physical Properties		
Density	1.1 g/cm ³	
Colour	whitish	
Processing Guidelines and Parameters		
Shelf Life	9 months	
Storage Temperature	-25 °C to 35 °C	
Processing Temperature	120 °C to 150 °C	
Viscosity	22,000 mPa·s	Anton Paar, 130 °C, cone-plate
Softening Point	67 °C	Ring+Ball
Typical Curing Time for Final Properties	3 d to 4 d	23 °C, 50 % RH, depending on ambient temperature and relative air humidity, considerably longer at lower temperatures and low humidity
Recommended Conditions for Good Results		
Ambient Temperature	18 °C to 25 °C	
Substrate Temperature	18 °C to 25 °C	
Relative Humidity	40% to 60%	

Product Properties

Processing

Suitable Substrates	PUR rigid foam Cotton Nonwoven Various metals Acrylonitrile butadiene styrene (ABS) Polyvinyl chloride (PVC) Pre-treated plastics Various plastic substrates Leather Wood based materials Paper
Consistency	Solid
Surface Requirements	Dry Clean Free of grease Free of dust Free of oil
Application Method	Nozzle Roller

Hints

Pretreatment of TPO	Thermoplastic polyolefin (TPO) must be oxidatively pretreated
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Additional Information

Storage

Rakoll® 4655 should be used within the shelf life specified on the packaging. The storage stability applies to material stored under appropriate conditions only (original unopened containers, recommended storage temperature).

Safety

Please read our Safety Data Sheet (SDS) of each product before use.

Preparation

Refer to the product properties section of this data sheet for special surface requirements.

Processing

Refer to the technical data table regarding processing parameters. Lower temperatures than recommended

can cause higher viscosity which result in reduced bond strength and reduced wetting. Depending on the construction of the equipment, a continuous heating above processing temperature can cause decomposition of the adhesive. Tank melters should use protective gases with < 5 ppm humidity, only. Rakoll® 4655 is moisture sensitive, therefore container must be kept closed.

Cleaning

Clean tools immediately after use. Once cured, the material can only be removed mechanically. Appropriate cleaners are listed in the product properties table. For further information please contact your local sales office.

Disposal

Please refer to the Safety Data Sheet (SDS) for disposal instructions.

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