Technical Data Sheet

Prefere 6416

One component PVAc adhesive
of D4 quality

Use

Prefere 6416 is a one-component PVAc dispersion adhesive, which gives glue bonds with high moisture and heat resistance. Prefere 6416 is well suited for finger jointing as well as for production of furniture, kitchen furniture, windows, doors, stairs etc.

Prefere 6416 is tested by IFT Rosenheim to be of durability class D4, according to EN 204/205. The adhesive is also shown to give high heat resistance when tested according to EN 14257 (WATT 91).

Prefere 6416 is approved for finger jointing and for lamination of building profiles of pine and spruce, according to BRL 2339.

Prefere 6416 can be used under both cold and warm conditions and are suitable for use under radio frequency heating conditions.

Technical data

Appearance	White, viscous liquid
Viscosity at 23°C (Brookfield RVT, sp 5, 20 rpm)	4500 - 6500 mPa.s
Solids content (1 hour at 120°C)	48,5 - 51 %
pH	2,5 – 3,5
Minimum film forming temperature	+ 8°C

Pumps

Due to the low pH-value of the adhesive it is recommend to use acid-resistant parts in pumps and other components the adhesive may come in contact with.

Storage of the adhesive

The shelf life of Prefere 6416 is dependent of the storage temperature; the higher the storage temperature, the shorter the shelf life. Optimal storage temperature is 15-20°C.

The table below shows the shelf lives from the date of production (stated on the containers) at different storage temperatures:

Storage temperature in °C	Shelf life in months
15	8
20	6
25	4
30	2

Prefere 6416 must be protected from frost. It should not be subjected to direct sunlight.

The adhesive must not be stored in unlacquered tin containers, due to the risk of rust formation and discoloration.

Delivery

Prefere 6416 is supplied in road tankers, IBC containers; 120 kg plastic drums; 25 kg buckets.

Glue spread

Recommended glue spread is 120-250 g/m², depending on the surface smoothness of the adherents and the required open assembly time.

Assembly time

Assembly time is the time elapsing between glue application and pressure application. It can be subdivided in open (from glue application until assembly of the adherents) and closed assembly time (from assembly until pressure is
established).

The assembly time depends on the absorbency and moisture content of the materials being bonded as well as on the glue spread, relative humidity, temperature and ventilation. Porous materials, low glue spread, dry air and extensive airflow will enhance dry out and reduce the assembly time.

Maximum open assembly time is ca 9-12 min at 20°C with a glue spread of approximately 150 g/m^2. The pressure must be applied while the glue is still wet.

Pressure

The pressure is first of all determined by the density, surface evenness and thickness tolerance of the adherends. Glue being squeezed out of the glue line when the pressure is applied, is an indication of sufficient pressure.

In finger jointing the end (longitudinal) pressure should be adapted to the joint profile, wood species and the cross section of the timber. For most soft woods an end pressure in the order of 2-5 N/mm² will be sufficient for finger joints of 25 mm length. For shorter joints an end pressure of 5-10 N/mm² is necessary.

For normal gluing operations like lamination the pressure should normally be 0,5 – 1,2 N/mm^2 (5 - 12 kp/cm^2).

Pressing times

For finger jointing the pressing time is normally a few seconds only. It depends on the process line, finger profiles and wood species. For lamination the pressing time is minimum 20 - 35 min at 20°C.

For all applications the pressing time must be adjusted so it gives sufficient bonding to allow further processing. Full strength and optimum moisture resistance is obtained after 1-2 days depending on the storage conditions. Curved constructions, high glue spread rate, high moisture content of the adherents and dense wood (hardwood) call for longer pressing times.

If radio frequency is used, the generator should be shut off minimum 30 sec before the press is opened.

Temperature	20°C
Pressing time	20-35 min

Note that Prefere 6416 is unsuitable for use at temperatures below 10°C. It is equally important to ensure that the wood temperature is above 10°C.

Cleaning

The application equipment should be cleaned with lukewarm water before the glue has dried. Dry glue remainders are best removed with a mixture of equal parts of water and acetone to which a small quantity of a synthetic detergent has been added.

Safety precautions

Reference is made to the Safety Data Sheet for Prefere 6416.

When handling the adhesive it is recommended that certain precautions, normal when handling chemicals, are taken. It is recommended to wear protective gloves, likewise eye protection where there is a risk of splashes. Hands and forearms should be thoroughly washed with soap and warm water at the end of the working day.

Adequate ventilation of the workshops should be maintained.

Notice

Replaces Technical Data Sheet dated 08.2009 TS/RHN 05.2014