

ABRABOND DX3

One-component PVA adhesive exceeding the requirements of EN 204 D 3 classification.

Properties

DX3 is a PVAc adhesive with good water resistance which meets the requirements of class D 3 as a one-component product.

DX3 sets very quickly. If heat is applied, very short pressing times can be achieved. The bonded joints are characterised by good high-temperature resistance.

The cured glue line is soft enough to avoid significant wear on tools when machining finished components.

Durability Class in accordance to DIN EN 204 D3

Applications

Examples of climatic conditions and areas of application:

Interior with frequent short-term exposure to running or condensed water and/or heavy exposure to high humidity. Exterior not exposed to weather.

- Surface gluing of decor-finish film.
- High-frequency bonding.
- Stationary edgbanding with veneers, plastic laminates and solid wood strips.
- Surface bonding of HPL/CPL in short cycle presses.
- Carcass and assembly gluing.
- Bonding joints in boards and block gluing of softwoods and chipboard as well as hardwoods.

Instructions for use

The open time and setting time depend upon working conditions such as temperature, humidity, absorbency of the materials being worked and amounts applied.

Good results will be achieved if the following conditions are observed:

Room and material temperature	18 ... 20°C
Moisture content of wood	8 ... 10%
Relative humidity	60 ... 70%
Amounts of adhesive to apply	
For surface bonding	80 ... 140 g/m ²
For assembly gluing	160 ... 180 g/m ²

Open time at 150 g/m ²	8 ... 12 min
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Press pressure, depending on type of bonding	0.1 ... 0.8 N/mm ²
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Minimum pressing times: Surface gluing of decor-finish film in short cycle presses	5 ... 10 sec
High-frequency bonding with longitudinal heating	from 15 sec
Surface gluing of HPL/CPL in	

short cycle presses at +70 °C	from 45 sec
Assembly gluing	8 ... 15 min
Boards and block gluing	10 ... 15 min
Laminating of wooden window profiles: In accordance with the Quality Guidelines of i.f.t. Rosenheim, "Laminated Profiles for Wooden Windows", the wood moisture content must be 13 ± 2%. The room temperature and the wood temperature must be at least +15°C.	

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Wood preparation

All parts should mate well and be dust and grease free. Over tolerances will lead to longer setting times and weaker bonds.

The joints should be cut shortly before bonding, especially in the case of hardwoods.

Applying the adhesive

Apply DX3 thinly and evenly to one side or, if a high degree of water resistance is required, to both sides, using a spreading machine, glue roller, serrated trowel, glue brush or another suitable device.

Presses

Lay the items to be bonded together within the workable time and press them for as long a time as is needed to achieve the required initial firmness upon release.

The pressure should be high enough to ensure contact of the parts over the entire area of the joint. Depending on the material and the type of bond being used, the mechanical firmness required for further processing of the parts is achieved within the shortest possible space of time. The higher levels of water resistance form more slowly and should be tested not earlier than 7 days after bonding.

Wood discoloration

Because of the varied nature of wood components, e.g., depending on the area of growth and the type of pre-treatment, unpredictable discoloration may in some cases appear on different types of wood, such as beech, cherry and others.

In addition, it is possible that iron together with the tannin in wood can cause discoloration, especially in the case of oak. We recommend you test this for yourself.

Cleaning

Clean machines and utensils with water before the adhesive dries.

Chemical-technical Data

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Base: PVAc dispersion adhesive

Viscosity: 9,000 to 15,000 mPa-s
Brookfield viscosity (25 °C; 6/20)

pH Value 2.8 to 3.6

Solids 49 to 51%
Solids content (110 °C; 60 min)

Properties of storage tanks, pipelines and spreading devices made from steel, galvanised steel aluminium or other non-ferrous metals cannot be re-commended on account of the slightly acidic nature of the dispersion, as there is a danger of corrosion. For this reason, we recommend the use of storage tanks, pipes and spreading devices made from stainless steel or plastic (hard PVC, poly-ethylene, polyester resin).

Labelling

DX3 is not subject to the marking regulations in accordance with the Dangerous Goods Act in its present version.

Safety advice

Please observe the information given on our EC-safety data sheets! (Please request).

Storage

Store away from frost in tightly closed original containers. Storage temperatures in excess of 25 °C considerably reduces the minimal storage time. Product can thicken a little after prolonged storage. The adhesive should then be thoroughly mixed and is then ready for use again. Shelf life is at least 6 months in unopened containers.