

Description

AV XL Plus is a medium to fast setting, medium solids, single pack, crosslinking PVA emulsion adhesive which develops excellent bond strength, high heat resistance and humidity resistance, without catalyst addition, when dried at normal or elevated temperatures. It produces a clear non staining glue line.

AV XL Plus is an excellent adhesive for cabinet and furniture assembly where high bond strengths, good water/humidity resistance and relatively short clamp times are required.

Features

- Designed for use with RF Curing equipment.
- Can be used in cold pressing and hot pressing applications.
- A single pack product producing a clear glue line.
- Water resistance exceeds DIN 68 602-D3
- Good creep resistance, exceeding the requirements for Resistance to Sustained Load of BS 4071.
- Waterbased and non flammable.

Applications

- Edge gluing timber sections
- Solid timber veneers or plastic laminates to core substrates
- Finger jointing
- Panel to frame gluing
- RF curing applications
- Suitable for use on many soft and hard woods as well as timber products such as medium density fibreboard (MDF), particle board and plywood.

Ensure adequate tests are conducted before using commercially. Mix thoroughly before use.

Precautions

Please note some timbers such as Blackwood and Beech may be susceptible to stain development and discolouration from adhesives, which are acidic in nature (low PH) such as **AV XL Plus**.

Use of adhesives in very cold conditions (below 10°C) may result in poor film formation with powdery glue line.

Surface Preparation

Wood surfaces to be glued must be clean, dry, free of dust, oil, grease and all finishes. Joints should be close fitting.

The work area, glue and substrate for bonding should be at least 15°C.

The moisture content of the wood should be between 8% and 12%.



Application Instructions

1. Apply adhesive to one surface only at a coverage rate of 5 - 10m² per litre of glue according to the substrate characteristics and working conditions.
2. Bring the second surface into contact and clamp assembly firmly and evenly while adhesive is still wet.
3. Clamps may be removed after a minimum of 3 hours at 20°C, depending on the moisture content/density of the materials being bonded.
4. Assembled parts should be left 24 hours to allow for complete curing of the glue line before further processing.
5. Any squeeze out of the adhesive from the joint, can be removed with a clean damp cloth prior to setting or sanded off after complete cure. The method is chosen to suit the application.

AV XL Plus has a relatively short assembly time, so pressure needs to be applied to the joint assembly within the 'open' time. This will vary with the density, 'wet-out' characteristic, moisture content of the substrates, and the atmospheric conditions occurring when gluing. Low temperature, damp conditions will extend the clamp time required considerably.

It is recommended that trials be conducted to determine the clamp time for a particular species / substrate.

Clamping Pressures

Softwood 50 PSI

Hardwoods 150 PSI

i.e. enough pressure to bring joints tightly together with some glue "squeeze out".

Clamp Times

Apply at a coverage rate of 5 - 10m² per litre of glue according to the substrate characteristics and working conditions.

| Temperatures | Low Density Timbers | High Density Timbers |
|--------------|---------------------|----------------------|
| 20°C | 90 minutes | 180 minutes |
| 30°C | 60 minutes | 90 minutes |

Glue lines should show glue squeeze out on application of pressure. Where the minimum pressure period is used, "dead" stacking of the freshly bonded panels or timber assemblies for 24 hours prior to machining is recommended.

RF Curing Application

AV XL Plus is suitable for use with RF Curing equipment. Trials should be conducted with the timber species and sections to be used in production to optimise curing conditions.

Hot Pressing

AV XL Plus can be used in hot pressing applications, in panel and general assembly gluing. Temperatures and Press Time conditions will vary for the particular application, substrate conditions, etc.

Properties

| | |
|-----------------------------|---|
| Type | Unfilled PVA |
| Solids | High |
| Viscosity | Medium |
| Open Assembly Time | 8 – 10 mins @20°C |
| Closed Assembly Time | 7 – 12 mins @ 20°C (depending on timber density) |

Storage & Shelf Life

Store in a cool, dry place, out of direct sunlight. Storage areas must be well ventilated and comply with Local, State and Federal regulations. For maximum shelf life, store between 5° and 20°C.

Shelf life is up to 9 months when stored in original, unopened containers, under the above conditions.

Do not allow product to freeze.

Ensure containers are well sealed when not in use.

To prevent the adhesive from skinning during use, ensure open troughs or holding reservoirs where there is little circulation are covered.

AV XL Plus is acidic in solution so should be used with plastic equipment. Contact with metal containers or equipment, other than stainless steel, in storage or use is not good practice and may cause staining problems in the glue line.

Do not store directly on concrete.

Clean-Up

Wipe excess glue from joints with clean wet cloth before glue sets. Clean up excess and equipment with water prior to setting.

Health & Safety

Please refer to the Material Safety Data Sheet which is available on request.

Product Details

| Item Number | Size | Pack Quantity |
|-------------|-----------|---------------|
| 912871 | 5 Litre | 4 |
| 912872 | 20 Litre | |
| 913043 | 200 Litre | |

The representations and recommendations regarding the products are based on tests which we believe to be reliable. However, no guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with a limited warranty only, and on the condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik Australia Pty Ltd be liable to anyone except for replacement of the products or refund of the purchase price.

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Quality
ISO 9001
SAI GLOBAL

Quality endorsed ISO9001 (Thomastown site)
TS16949 (Automotive).

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