

# SabreBond™ XL500

SabreBond XL500 is one component cross-linking aliphatic PVA adhesive which exceeds the D3 requirements according to EN204. Used for all timber lamination and joinery work, it is also suitable for flat veneer and laminate bonding and responds well to RF curing. SabreBond XL500 sets up very quickly providing short pressing times which will increase production and through-put, it is also sandable, setting up hard and clear, making it ideal for furniture manufacturing.



## Fields of Application

- Moisture resistant gluing of windows, doors and stairs according to EN204/D3.
- Surface bonding of decorative papers.
- Edge gluing with veneers, plastic laminates and solid wood stripes.
- Surface bonding of decorative high pressure laminates in short-cycle presses.
- Cabinet and assembly bonding with medium pressing times and preheating devices.

## Physical Properties

<b>Base</b>	PVA Dispersion
<b>Colour</b>	• Wet - White • Dry - Clear
<b>Solids</b>	48-50%
<b>Viscosity</b>	@ 25°C- 4,500 - 5,000 cPs
<b>Ph</b>	3.0 - 3.5

## Product Usage

Apply SabreBond XL500 in a thin and uniform coating to one surface. If higher water resistance is required, apply to both surfaces. SabreBond XL500 can be applied using glue spreaders, glue rollers, notched trowels, brushes or other appropriate tools.

Clean application tools with water before adhesive starts to dry and set. Set adhesive needs to be removed mechanically.

The open assembly and setting times largely depend upon the working conditions such as temperatures, moisture, absorbency of materials, glue spreads and tensions of the materials. Best results are obtained under the following conditions:

- Room, material and glue temperature-18 – 20°C
- Wood moisture-8 – 10%
- Relative humidity-60 – 70%
- Glue spread: for surface bonding-80 – 140 g/m<sup>2</sup>  
for assembly bonding-160 – 180 g/m<sup>2</sup>
- Pressure depending on type of gluing- 0.1 – 0.8 N/mm<sup>2</sup>

### Minimum pressing times:

- Surface gluing of decorative papers-from 10 seconds
- Surface gluing of high-pressure laminates
- Zin short-cycle presses (90 – 105°C)-from 60 seconds (@ 4 – 6 Bar)
- Assembly bonding-30 minutes
- Board joint and blocks bonding-45 minutes

## Gluing Tips & Procedures

- Preparation and Machining – Careful attention to the machining and preparation of edges before assembling will result in obtaining the strongest possible bonds.
- Planning the edges to be bonded is recommended over against using a circular saw, as saw blades tend to damage the bonding surfaces by tearing the wood fibres as they cut, leaving a rough surface which often requires excessive clamping pressure to bring the two surfaces together; where as a planner shears the fibres longitudinally, leaving them undamaged, with a flat surface, that requires less clamping pressure, leaving an almost invisible glue line.
- Most joint failures are the result of poor preparation or machining, so this process is critical. A factor like dull knives or planner blades will crush and glaze the wood fibres leaving the bonding surface like glass. These glazed fibres will not absorb the adhesive and result in weak adhesion or bond. A simple test is to place a droplet of water onto the surface and if it stays beaded for over 30 seconds, the surface will be glazed.
- Another often challenging area is the gluing of resinous timbers like Teak, Heart Rimu, Jarrah, Mahogany and others that require special preparation before gluing. These timbers have resinous extractives that can concentrate on the surface as the timber dries, making them almost water-resistant and prevents water-borne adhesives from penetrating the surface. The safest way is to dress these timbers immediately before gluing, not letting the dressed timber to sit too long as the resins will rise quickly to the surface again – within an hour or so.
- For the ultimate bond strength, it is imperative also that the adhesive is spread evenly over the entire bonding surface.

## Shelf Life

1 year from date of manufacture.

## Storage

Product should be stored in the original container out of direct sunlight between 5°C and 30°C and protected from freezing. Rotate stock using oldest batches first. Close containers air tight after use. For best performance, use product within 12 months of manufacture.

## Safety & Disposal

This material is non-hazardous. Refer to the Material Safety Data Sheet (MSDS) for further information.

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### IMPORTANT NOTICE

Sabre Adhesives Limited makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of application. Due to the fact that specific substrates, such as: plastics, polycarbonates, etc, may differ from manufacturer to manufacturer we recommend preliminary compatibility tests. Please remember that many factors can affect the use and performance in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a product. Given the variety of factors that can affect the use of our products some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

### LIMITATION OF REMEDIES AND LIABILITY

If the product is proved to be defective, the sole remedy shall be to refund the purchase price or to repair or replace the defective product. Sabre shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.

## New Zealand

+64 6 366 0007  
40-42 Cambridge St South  
Levin 5510

## Australia

+61 2 9098 8244  
Level 6, 10 Herb Elliott Ave  
Sydney Olympic Park, NSW 2127