

## Description

Sealed PVA is a polyvinyl acetate bonding agent used in many varying building situations. It is a multi-purpose material that can be used both as a straightforward bonding agent, a surface sealer and/or an admixture in cement-based mixes to be used in dry areas not subject to rinsing or continual dampness. Conforms to BS 5270 – Bonding agents for use with gypsum plasters and cement and ASTM C 631-70.

## Applications

As an adhesive for most common building materials. Bonding agent for internal renderings, floor toppings, key plaster, cement screed, etc. For general concrete repair and sealing of concrete.

## Advantages

Sealed PVA will impart improved abrasion resistance to the finished surface when incorporated in mortar mixes. It improves the adhesion of cement paints and to sulphate bearing brickwork. The product is alkali resistant, cures to a tough and flexible film.

## Technical Properties

Property	Value
Appearance	White Liquid
Specific Gravity	1.01 $\pm$ 0.02
Chloride Content (%)	Nil
Solid Content (%)	44 $\pm$ 1
pH Value	5.0 – 6.0

## Packaging

20 ltr. pail and 200 ltr. drums.

## Safety

Non-hazardous, but care should be taken to avoid splashes in the eyes and inhaling the vapors. Contains small quantities of bactericide. Avoid prolonged contact with the skin. Harmful if taken internally. Please refer to the Material Safety Data Sheet for details about safe handling of the product.

## Usage Instructions

**Preparation of Substrate:** Make sure the surface is dry and not subject to rising or continual dampness. Clean well to remove all unsound and foreign matter i.e. mold oil, dust, laitance, grease, lime wash, distemper, emulsion paint, flaking paint, etc.

**Rendering:** Bonding to porous surfaces such as brick, concrete, asbestos etc. Porous and dusty surfaces such as asbestos, concrete walls and floors should be primed with a solution of 1 volume of Sealed PVA and 5 volumes of water and allow to dry. Then brush onto the surface a solution consisting of 1 volume of Sealed PVA and 3 volumes of water and when dry render to a maximum thickness of 10 mm.

**Alternative method for thicker rendering coats:** Prime with a solution of 1 volume Sealed PVA and 5 volumes of water and allow to dry. Prepare a mix of 2 parts of clean sand and 1 part Portland cement gauged with a mixture of 1 volume of Sealed PVA and 3 volumes of water. Scrub well into the surface and stipple up using a banister type brush. Cure for 72 hours before applying renderings to a maximum thickness of 15 mm. Setting of the Stipple coat can be accelerated by adding 1 part of Sealed PVA Double Strength PREMIX to 8 parts of gauging liquid. 5 liters of Sealed PVA covers approximately 40-45 m<sup>2</sup> with either method.

**Bonding to non-porous surface:** The surface must be washed down with detergent and rinsed off, to ensure that the surface and the joints are thoroughly clean. Prime with a solution of 1 volume of Sealed PVA to 5 volumes of water, allow to dry. Then brush onto the surface a solution consisting of 1 volume of Sealed PVA and 1 volume of water and when dry render to a maximum thickness of 10 mm.

### Flooring and General Concrete Repairs:

- For abrasion and oil resisting jointless floor toppings, levelling screeds, patching, filling cracks in renderings and repairing worn concrete. Prime porous surfaces first with 1 volume of Sealed PVA to 6 volume of water. Dilute 1 volume of Sealed PVA with 3 volumes of water and use this as gauging liquid for sand and cement repair mortar or topping mix (1 part Portland cement, 3 parts sand, 3-6mm size clean aggregate). Apply as normal concrete, and cure by covering for 48 hours. Very thin screed and toppings are possible by this method.
- About 6 liters of Sealed PVA required per 50 Kg of Portland cement.
- Sealed PVA can be used to seal hardboard, asbestos, renderings, plasterboard, etc and is especially suitable prior to the application of interior emulsion paints and wallpaper.
- Dilute one volume of Sealed PVA with 6 volumes of water, brush or spray onto the surface and allow to dry. 5 liters of Sealed PVA is sufficient for 400 m<sup>2</sup>.

**General Adhesive:** Bonding glazed, acoustic, lino and concrete tiles and wooden blocks. Prime the tile and foundation with 1 volume of Sealed PVA to 20 volumes of water. Allow to dry. Make up a slurry to the tile, leave 2 to 5 minutes to become tacky then press the tile firmly into position. Bonding cloth, hessian, canvas, paper, hardboard, plasterboard etc. to themselves and other substrates. Apply Sealed PVA undiluted to both surfaces which should then be pressed firmly together and clamped if possible. Any porous surfaces should first be primed with a solution of 1 volume of Sealed PVA to 6 volumes of water.

**Wood Bonding:** Bonding soft and hardwoods block board, chipboard, and plywood to themselves or other substrates. Apply Sealed PVA neat to both surfaces. Allow to become tacky and then support, clamp or weight as required until the bond is affected. Wood, Hardboard, etc. to plaster or other porous surfaces. Prime substrate with 1 part of Sealed PVA diluted with 6 parts of water. When dry apply a neat coat of Sealed PVA to both surfaces and bring into contact with pressure. Do not disturb until well bonded.

### Plastering:

- High performance - rapid strength gain allied with high ultimate strength makes it ideal for structural repairs.
- Bonding gypsum plasters to porous and non-porous surfaces including glazed tiles, brick, asbestos, painted, etc.
- Dilute 1 volume of Sealed PVA with 3 volume of water and apply this to the surface. On very hungry substrates a second coat should be applied. On glazed surfaces across brush to ensure total areas is covered. For cracks and holes remove loose material and prime with one volume of Sealed PVA to 6 volumes of water before filling in patching mix. Apply plaster normally when coat of Sealed PVA is dry.
- A suitable backing coat is a Premix lightweight aggregate plaster for low suction backgrounds or site-mixed gypsum plaster and clean sharp sand (1:1-1/2). Never apply plaster for high section backgrounds onto Sealed PVA. Painted
- Surfaces must be must tested for soundness. 5 liters Sealed PVA will cover 100 m<sup>2</sup> depending upon porosity.

To improve the adhesion and toughness of plaster and to reduce dusting. (E.g. corners and corridors). Dilute 1 volume of Sealed PVA with 5 volumes of water and use this as the gauging liquid. This allows the mix to retain water and eliminates the need to prime high suction backgrounds.

The following results were obtained by using Thistle Board Coating Plaster with the addition of Sealed PVA at the rate of 5% and 10% by weight on the plaster.

	Flexural Strength (Kg/m <sup>2</sup> )	Tensile Strength (Kg/m <sup>2</sup> )	Abrasion F. Abraded
Control	4.4	13.6	6.2
5% Sealed PVA	8.0	24.7	3.0
10% Sealed PVA	10.6	29.6	0.7

**Cleaning of tools:** Wash mixers, brushes and tools immediately after use in water. Do not empty Sealed PVA into drains it may block them.

## Contact Info

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