

EVERBUILD PVA BOND

DESCRIPTION

EVERBUILD PVA BOND is a medium viscosity, polyvinyl alcohol stabilized, externally plasticised, vinyl acetate homopolymer. Contains no harmful phthalates.

It has been designed specifically for use in the building industry as a general purpose bonding agent, and additive for concrete and plasters and as a multi-use adhesive.

PVA BOND meets the bond strength requirements of BS5270, "Polyvinyl acetate (PVAC) emulsion bonding agents for internal use with gypsum building plasters".

BENEFITS

- * Greatly improved adhesion to a wide range of substrates including dense concrete, glass, steel, tiles etc.
- * Mixes may be applied in much thinner sections resistance to salt permeation.
- * Reduced surface dusting of concrete
- * Improves flexibility of sand cement products.
- * Reduced water: cement ratio for equivalent workability
- * Improved frost resistance
- Reduces surface porosity of mortar/plaster

Universal polyvinyl acetate (PVA) adhesives or bonding agents find wide use in the building industry. The areas of use are generally non-specialised, however, there is a requirement to meet BS5270 "Polyvinyl acetate bonding agents for internal use with gypsum modified plasters".

PVA BOND meets the requirements of the Universal PVA market and can be used in a similar fashion to other phthalate plasticised PVA emulsions and visually appears no different.

PVA BOND contains an environmentally acceptable non-phthalate ester plasticiser to enable low temperature film formation and confer film flexibility.

BONDING AGENT REQUIREMENTS

- (a) *Fulfilment of the requirements detailed in BS5270*
- (b) *Does not contain a phthalate ester plasticiser*
- (c) *Good selling properties*
- (d) *Effectiveness as a general purpose wood adhesive*
- (e) *Compatibility with cement and gypsum*
- (f) *Goods adhesion to concrete*
- (g) *Excellent high and low temperature stability*

PVA BOND MEETS ALL OF THE ABOVE REQUIREMENTS

AREAS FOR USE

- As a general purpose adhesive for wood, cork, paper, textiles etc.
- As an admixture for mortar/screeds/renders.
- As a bonding agent for screeds/renders to difficult substrates.
- As a primer/sealer in tiling applications.
- As an internal filler when mixed with wood shavings, plaster etc.

LIMITATIONS

- Not suitable for external applications. Use EVERBUILD SBR BOND
- As a wood adhesive, do not use as an externally or for load bearing applications.. Use EVERBUILD ALL PURPOSE WATERPROOF WOOD ADHESIVE

SURFACE PREPARATION

All surfaces must be clean, dry and free from grease.

APPLICATIONS

PRIMING AND SEALING

Where the emulsion is to be used on porous substrates (old concrete, plaster, plasterboard etc.), it should be diluted 4 parts water : 1 part emulsion to seal the surface in preparation for further coating.

BONDING

PVA BOND can be used to bond plaster and cement renders/ repair compounds.

To bond plaster, the emulsion should be diluted 3 parts emulsion : 1 part water and brushed onto the surface to be plastered. Fresh plaster should be applied before the emulsion dries.

The bond strength of the plaster to the substrate meets the requirements outlined in BS5270 (Plaster bonded to glass).

To bond cementitious renders or repair compounds, two methods of use can be considered.

- i) **Small areas**:- mix **PVA BOND** with an equal amount of water and add this to the mortar/concrete mix (the emulsion exhibits excellent compatibility with cement).

When added to a concrete/mortar mix, **PVA BOND** will improve adhesion and also tensile/flexural strength of the cured concrete in a similar way to conventional PVA bonding agents.

- ii) **Larger areas**:- dilute the emulsion, 3 parts emulsion : 1 part water and brush onto the surface to be coated/ repaired. Apply a normal concrete mix before the emulsion dries.

W O O D W O R K I N G

PVA BOND will bond wood in similar fashion to conventional bonding agents.

The emulsion should be used neat in woodworking applications. In laboratory test, wood failure was observed in joints constructed with PVA BOND.

In common with conventional PVA bonding agents, PVA BOND should not be used for load bearing applications. Alternative emulsions that conform to BS4071 "Specification for PVA Wood Adhesives" should be used for these applications., eg EVERBUILD ALL PURPOSE WOOD ADHESIVE.

S T O R A G E S T A B I L I T Y

PVA BOND exhibits excellent stability at high storage temperatures. After 1 weeks storage at 50°C no significant changes in viscosity were observed.

G E N E R A L P U R P O S E A D H E S I V E S

PVA BOND can be used to stick paper, cardboard and other similar porous substrates.

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SPECIFIC DATA

Total Solids (%)	40.0 +/- 1%
Viscosity @ 23°C Brookfield RVT 5/20 Poise mPa.s	120 - 200 12000 - 20000
pH	4.5 - 5.5
Minimum Film Forming Temperature (°C)	Approx 2
High Temperature Stability (1 week @ 50°C)	Stable
Specific Gravity	1.07

<u>PERFORMANCE AS A BONDING AGENT</u>
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	<u>BS5270 PERFORMANCE</u>
PVA BOND	PASS

PVA BOND

Competitive

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		41% TSC (DiBP)
Total Solids +/-1%	40	41
Viscosity (5/20 -23°C)/ Poise	120 to 200	100 - 150 (@ 25°C)
Film Appearance	4 5 is nearly clear	1 1 is cloudy
Water Spotting	3 1 blanches immediately	1 5 only slowly
Manual Abrasion	3 1 is redispersible	1 5 is resistant to abrasion
Wet Film Strength	3 1 redispersible , 5 good wet only slight difference between	No wet film strength film strength 2 & 3
Cement Compatibility	5 5 = Excellent, 1 = Poor,	5 (G = Gelled)
MFFT/°C	2	4
Viscosity stability 1 week @ 50°C % change 6/20	-12	-12

HEALTH AND SAFETY

PVA BOND is water based and is non-toxic under normal conditions. See separate MSDS for this product.

STORAGE

To ensure safe storage of PVA BOND, containers should be well sealed to prevent evaporation of water and the formation of skin on the surface. The emulsion must be stored at a temperature above freezing. A temperature of 5-25°C is recommended. Higher temperatures will affect quality and cause the formation of crusts and skins, especially if the containers are not tightly closed or subjected to direct sunlight for long periods. If these conditions cannot be met, please refer to our Technical Service Department who will advise on storage stability.

SHELF LIFE

Minimum of 12 months in original unopened containers.