



# **PVA – MULTI-PURPOSE ADHESIVE AND BONDING AID**

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**ADHESIVE FOR TIMBER &  
POROUS SURFACES**

**ADMIXTURE & BONDING AGENT  
FOR CEMENT BASED MIXES**

**PRIMER & SEALER FOR  
POROUS SUBSTRATES**

## **DESCRIPTION:**

PALACE PVA is a poly-vinyl acetate homo-polymer, formulated as a high viscosity, high-solids emulsion. It is a safe to use, multi-purpose, water based adhesive, sealer & bonding agent, which can be applied to a wide range of building materials and applications not intended for contact with water. PALACE PVA conforms to BS 5270 when used as a primer / sealer on porous surfaces and also complies with the requirements of BS EN 204 / D2 for use as a wood adhesive.

PVA as an **ADHESIVE** is ideal for bonding most common building materials such as wood, plaster, cement render, brick and concrete where at least one of the contact surfaces is porous and is not subject to frequent exposure to water.

PVA as a **BONDING AGENT** can readily be incorporated into mixes of sand cement screeds, plasters and renders, giving a water reducing and plasticising effect, as well as improving wet-tack and adhesion of the render to the existing base masonry.

PVA as a **PRIMER / SEALER** is ideal for porous surfaces such as gypsum plaster, old / worn concrete; sand cement screeds and render by reducing porosity, surface dusting and suction so that subsequently applied adhesives, renders or screeds can dry and cure without rapid moisture loss into the base substrate.

## **PVA ADHESIVE:**

Apply as a thin even coat of neat PVA to just one face of the joint, then firmly press and hold together. Large surface areas may require clamping for up to 24 hours to ensure a consistent bond is achieved, particularly where one of the joint faces is impermeable. PVA should not be used in applications where the ambient temperature is below 5°C and it should be noted that at temperatures below 15°C the bond will dry at a slower rate. When applying onto very porous surfaces, prime with 1 part PVA diluted with 3 parts water and allow to dry before uniting the joints with a coat of neat PVA. Excess adhesive squeezing out from the joint edges should be wiped away with a damp cloth and all tools and non-contact surfaces can be cleaned with warm soapy water. PVA dries to a clear, slightly glossy film, however it is unsuitable for joints where regular contact with moisture is likely and for such applications PALABOND WATERPROOF WOODWORKING ADHESIVE should be used.

## **PVA BONDING AGENT:**

PVA can be used as a bonding agent when over-laying existing masonry with a fresh coat of render, plaster, concrete or screed. Thorough preparation of the existing surface, is essential to ensure the success of the bond and all loose dust, flaking material, grease and any deteriorating surface coatings should be removed before applying PVA as a bonding agent. Highly porous surfaces should first be sealed with a coat of PVA diluted as 1 part to 4 parts with water. When this is dry apply the PVA bonding coat as a 1 : 1 dilution with water and allow it to dry to be "tacky to touch" before applying the cement render, plaster or screed. To improve the durability and bonding properties of domestic, thin layer renders or floors screeds (5 to 20mm), add PVA to the gauging liquid at a rate of 5 litres per 50 kg of cement. Concrete and heavier duty floor screeds (> 25mm thick) will require the addition of PVA at 10 to 15 litres per 50 kg of cement per mix. In both cases the PVA will have a water reducing effect therefore the addition of water to the mix should be kept to the minimum required to achieve application consistency. Use a wet-faced trowel to finish off the render and give a smooth even surface.

## **PVA PRIMER / SEALER:**

On porous, worn or dusty concrete floors, PVA diluted as 1 part to 3 parts with water and brushed on as a generous single coat, can seal the surface, reduce suction and inhibit further dusting. One coat is normally sufficient for priming surfaces ready to receive an application of SELF-LEVELLING COMPOUND or FLOOR TILE ADHESIVE, however very porous and friable surfaces may require two coats to be effective, particularly where no further coating is to be laid. On gypsum plaster or porous cement rendered walls, PVA diluted as 1 part to 4 parts with water, is sufficient preparation to reduce suction, bind the surface and give a consistent substrate, primed for the application of a ready mixed tile adhesive. Plaster walls which have been over-finished to a polished appearance should be slightly roughened with a stiff brush and wiped clear of loose fines before priming with PVA diluted as 1 to 4 with water.

## **COVERAGE:**

The consumption of PVA for any particular application depends heavily upon the texture and porosity of the surface it is applied to and the figures shown below are intended as a rough guide only.

<b>ADHESIVE:</b>	<b>BONDING AGENT:</b>	<b>PRIMER / SEALER:</b>
8 – 10 square metres per litre.	12 – 24 square metres per litre.	20 – 30 square metres per litre.

## **STORAGE & PACKAGING:**

PVA is supplied in 125ml; 250ml; 500ml; 1 litre; 2.5 litre; 5 litre & 25 litre bottles and has a storage life of not less than 12 months if stored in dry, un-opened conditions. Consult the PVA material safety data sheet for advice on handling and safety procedures. Should further more specific technical information be required, contact the Palace Technical helpline on 0151 486 6101.

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate. However it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request.

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<b>SUBSTANCE IDENTIFICATION:</b>			
<b>PVA BONDING AGENT</b>			
<b>COMPOSITION;</b> An aqueous dispersion of Vinyl Acetate homo-polymer emulsion stabilised with Poly-Vinyl Alcohol.		<b>HAZARDS CLASSIFICATION:</b> NON-HAZARDOUS Not subject to statutory hazard labelling in accordance with the CHIP regulations.	
<b>FIRST AID MEASURES:</b>			
<b>INHALATION:</b> If inhaled, clear out mouth with clean water and seek medical attention. If irritation or breathing difficulties persist, seek medical attention.	<b>SKIN CONTACT:</b> Wash off skin with clean running water. Remove and launder heavily soaked clothing which may be in contact with skin	<b>INGESTION:</b> Clean out mouth with copious volumes of water. Do not induce vomiting. Seek prompt medical attention and show this data sheet.	<b>EYE CONTACT:</b> Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.
<b>FIRE FIGHTING MEASURES:</b> This product is a NON-FLAMMABLE polymer dispersion based building admixture. Outer packaging surrounding this product will combust at when exposed to flames			
<b>ACCIDENTAL RELEASE MEASURES:</b> Absorb large spillages on sand, sawdust or absorbent granules and confine residues in a clearly marked sealed container for disposal in accordance with Local Authority regulations for water based polymer dispersions. Keep away from drains and watercourses			
<b>HANDLING &amp; STORAGE:</b> Store in sealed, clearly marked containers. Keep out of reach of children in a cool well-ventilated and dry environment (Temps < 40°C).			
<b>EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENT:</b> <b>Occupational exposure limit:</b> for residual levels of 20 ppm Styrene free monomer.			
<b>Respiratory:</b> Good ventilation is always recommended when applying this product. In confined spaces respiratory equipment with organic vapour filter is advised	<b>Hand:</b> Wear 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420.	<b>Eye:</b> Splash proof BS 2092 Goggles are advised wherever there is a risk of liquid adhesive entering the eyes e.g. during overhead work.	<b>Skin:</b> Wear a disposable plastic apron or overalls, which should be laundered after use if contaminated. Waterproof safety boots/shoes are also recommended

# SAFETY DATA SHEET No. 004

## PRODUCT: PVA BONDING AGENT

<b>PHYSICO-CHEMICAL PROPERTIES:</b>		
Appearance – Milky white liquid. Ph – 4.0 – 5.0 Density – 1.05 Odour – Distinctive acetic acid (vinegar) type smell. Exposed product will readily dry to form a tacky film, which becomes smooth & clear.	Flash point - n/a Boiling point - > 100°C Vapour pressure - 25 hPa Auto-ignition temperature - n/a Viscosity - 2000 - 3500 mPa.s Miscibility - 100% with water - none with in oils	
<b>STABILITY &amp; REACTIVITY:</b> Materials to avoid - Will react with concentrated acids and strong oxidising agents. Conditions to avoid - High temperatures No known hazardous decomposition products - dissolves to harmless soluble salts		
<b>TOXICOLOGICAL INFORMATION:</b> Non-toxic under normal condition of use.		
Acute toxicity: n/a Corrosivity: N/A	Sensitisation: n/a Mutagenicity: n/a	Carcinogenicity: n/a Reproductive toxicity: n/a
<b>ECOLOGICAL INFORMATION:</b> Persistence & degradability - no evidence of bio-accumulation Ecotoxicity – May harm aquatic life in confined low volume watercourses Bio-accumulative potential - All components are readily biodegradable.		
<b>DISPOSAL CONSIDERATIONS:</b> Dispose all volumes according to Local Authority regulations for aqueous, low hazard polymer dispersions. Coagulate polymer phase and dispose aqueous phase under a bio treatment regime		
<b>TRANSPORT INFORMATION:</b> Not subject to CPL / ADR restrictions		
<b>REGULATORY INFORMATION:</b> CHIP Hazard symbols: NOT CLASSIFIED AS HAZARDOUS as supplied. <b>Other regulatory controls:</b> Health & Safety @ Work Act 1974; Control of Substances Hazardous to Health Regulations 1994. Environmental Protection Act 1990.		
<b>FURTHER INFORMATION:</b> The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.		