



TECHNICAL DATA SHEET

WATER-RESISTANT PVA-4

DESCRIPTION

Construction Chemicals Water-Resistant PVA-4 is a single part, cross linking, modified polyvinyl, acetate-based emulsion, high quality wood adhesive. Suitable for all joinery applications where D4 water resistance is required e.g. Exterior furniture, windows, doors, high pressure laminates, kitchen & bathroom furniture. PVA-4 is particularly useful when bonding Accoya wood.

USES

Construction Chemicals PVA4 is a multipurpose, water-resistant adhesive suitable for general assembly and lamination on particle board and MDF. High Quality D4 Water-Resistant Adhesive. Used extensively for high quality Joinery in both Hardwood and Softwood e.g. the manufacture of Window and door frames, staircases, decking and numerous other applications. Manufactured to meet or exceed EN 204

FEATURES

- Ready for use
- Excellent initial tack with short open time i.e. quick drying.
- Good durability
- Conforms to the requirements of BS EN 204 D4
- Cross linked for use in RF, IR & UV drying
- High storage stability. 6 month pot life.

PHYSICAL PROPERTIES

Colour	White
Solids Content	49-53%
Physical Form	Viscous liquid
Viscosity	4000-10000 mPas. Brookfield DVII, 20RPM 20°C
Mfft	8°C

METHOD OF APPLICATION

Working Conditions

Minimum temperature for use	15-20°C
Ambient temperature (Warehouse, wood, laminates, glue)	18 – 20°C
Humidity of wooden substrates	8 – 12%

Coating Weight

For wood lamination	120 – 160 gm ²
For flat surfaces	100 – 150 gm ²
For assembly	200 – 300 gm ²

Assembly Time

4 8 minutes

Pressure

Wood on wood	2 – 5 bar (kgf/cm ²)
Laminates on wood	1 – 2 bar (kgf/cm ²)

Pressing Time (minimum)

Wood on wood at 20°C	10 – 15 minutes
Decorative paper at 80 - 100°C	5 secs
High pressure laminate & veneering at 80 - 90°C	50 - 70 secs
High pressure laminate & veneering at 18 - 20°C	20 - 40 mins

Solid Wood

At room temperature	40 – 120 mins
At 50 – 70°C	10 – 12 mins
By RF	2 – 3 mins
For laminated panels 30mm thickness	2.5 – 3 mins
For window frames three layer 85mm thickness	6mins

STORAGE Protect from frost. Store between 5°C - 20°C.

PACKAGING

5KG plastic container
1KG squeezy bottle

GENERAL PRECAUTIONS

- Do not add anything to the adhesive to modify its properties.
- However, because some thickening may occur, it is possible to add water (maximum 2-3% by weight) to obtain the original viscosity.
- Provided that contact with iron is avoided, the adhesive should not cause staining.
- After each use, close the container tightly in order to avoid skin formation.
- Coating equipment and tools can be cleaned with warm (35-40°C) water, before the adhesive has dried out.
- For health, safety and disposal please refer to the material safety data sheet.

IMPORTANT RECOMMENDATIONS

Before commencing work, these recommendations should be studied carefully together with specific items related to the adhesive. We suggest that suitable conditions should always be assessed by means of a test specimen.

SURFACE PREPARATION

- Substrates to be bonded should be perfectly clean, dry and free from dust and grease.
- For laminations, surfaces should be homogeneous and flat.
- Assemblies should be precise in order to avoid thick adhesive lines (0.2 – 0.3mm maximum).
- Wood should be allowed to condition several days in the workshop atmosphere (15 to 20°C) before bonding. Its relative humidity should be approximately 10 to 12%.

METHOD OF USE

Assembly

- The parts to be bonded should be brought together immediately after application, whilst the adhesive is still wet.
- The maximum open assembly time depends on the substrate porosity, ambient temperature and coating weight. Do not exceed the values given on Page 1.

Pressing

- After assembly, pressure should be maintained during the adhesive's initial setting period, using conventional methods such as presses, vices, jigs, clamps or deal loads. Refer to the maximum pressure values on Page 1. This is not necessary for finger joints.
- Pressing time depends on such variables as ambient temperature and humidity, coating weight, porosity of substrates and dimension of assemblies. Reference values are given on Page 1 but a test specimen will allow this to be calculated.
- Pressing time can be reduced by heating one of the substrates to be bonded before pressing at room temperature. We recommend pre-heating of the surface (1 to 2 minutes to 80°C).
- Hot pressing should only be recommended for double-sided flat lamination.

Stabilisation of Bonds

- Time between removal from the press and machining should be at least the value indicated on Page 1.
- Complete setting of the adhesive needs at least 24 hours.
- Optimal water resistance is achieved after 1 week.