



TECHNICAL DATA SHEET

CONSTRUCTION CHEMICALS WATER-RESISTANT PVA

DESCRIPTION

Construction Chemicals Water-Resistant PVA is a single part, curing, polyvinyl, acetate-based emulsion.

USES

Construction Chemicals Water-Resistant PVA is a multipurpose, water-resistant adhesive suitable for general assembly and lamination on particle board and MDF.

FEATURES

- Ready for use
- Fast setting
- Good durability
- Conforms to the D3 requirements of BS EN 204-205
- Cross linked for use in RF curing.

PHYSICAL PROPERTIES

Colour	White
Physical Form	Viscous liquid
Viscosity (Brookfield 20rpm at 23°C)	Approximately 15 000 mPa.s
Specific gravity	Approximately 1.10

METHOD OF APPLICATION

Working Conditions

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

Coating Weight

Flat lamination, paper (single face coverage)	20 – 70g/m ²
Flat lamination, HPL, thick foils (single face coverage)	100 – 200g/m ²
Assembly (single face coverage)	150 – 200g/m ²

Assembly Time

Pressure	4 8 minutes
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
Assemblies with one face preheated	2 – 3 minutes
Laminates on wood at 20°C	20 – 30 minutes
Laminates on wood at 80°C	3 – 4 minutes
Stabilisation Time	2 hours minimum

STORAGE

12 months closed in its original packaging between 5 and 30°C.

Protect from frost.

After prolonged storage, stir well before use.

PACKAGING

25KG plastic Drum

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

Application of Adhesive

For lamination, apply an even coat of adhesive to one of the substrates by roller coater, brush or spatula.

For assembly applications, we recommend that both surfaces should be coated.

Coating weight depends on substrate, porosity, open time and ambient temperature.

General features:

Flat lamination	100 to 240 g/m ²
Panelling, edge joining	200 to 350 g/m ²
Other (mortice/tenon, tongue/groove)	Coat both sides

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.

MATERIAL SAFETY DATA SHEET

1. Identification of the Substance/Preparation and Company

WATER RESISTANT PVA

Supplier CONSTRUCTION CHEMICALS
75 TOWN GREEN STREET
ROTHLEY LEICESTER

Telephone: 0116 230 1955

2. Composition/Information on Ingredients

N-butyl ester of glycollic acid <2.5% Xi R41 Risk of serious damage to eyes.

3. Hazards Identification

The product is non-hazardous. General cleanliness in use should be observed.

4. First Aid Measures

Inhalation: Provide patient with fresh air and seek medical advice.
Eye contact: Irrigate thoroughly with water and seek medical advice.
Skin contact: wipe off excess with a paper towel, then clean with resin removing cream or hand cleanser. DO NOT use solvents. Finally wash with soap and water.
Ingestion DO NOT induce vomiting. Seek medical advice.

5. Fire Fighting Measures

The material is incombustible in emulsion form. Use appropriate extinguisher for the surrounding conditions.

6. Accidental Release Measures

Do not allow to enter drains or water courses. Absorb on dry earth or sand. Collect up by shovel or scraper, Then scrub affected area immediately with detergent and water.

7. Handling and Storage

Avoid frost and freezing conditions in storage and transportation Store in a dry place in the temperature range 5 to 300C.

8. Exposure Controls/Personal Protection

Use eye protection if splashing is a possibility.

9. Physical and Chemical Properties *

Appearance: white aqueous emulsion
Relative density: approx 1.1 g/mL
Miscibility: miscible with water

10. Stability and Reactivity

Avoid freezing conditions.

In a fire, smoke and fumes with carbon dioxide and carbon monoxide will be generated with a small amount of acid gases, in particular hydrochloric acid.

11. Toxicological Information

The product is non-hazardous but ingestion may cause obstruction. Contact with the eyes may cause physical damage.

12. Ecological Information

Contamination of both terrestrial and marine environments should be avoided.

13. Waste Disposal

This material is not such as to be classified as "special waste" as the term is defined by the Control of Pollution (Special Waste) Regulations 1980 and may be disposed of by landfill tipping.

*These figures are typical but do not constitute a specification

14. Transport Information

Not applicable.

15. Regulatory Information

The product is not classified as "dangerous" as the term is defined by the Chemicals (Hazard Information and Packaging) Regulations 1993.

16. Other Information

- The product should be used as directed. For further information consult the application data sheet or contact Technical Services. This Safety Data Sheet was compiled using the current safety information supplied by the distributors of the component