

PURITY+

PREMIUM POLYVINYL ACETATE (PVA) EMULSION

Technical Data Sheet (TDS)

Purity+ is a high-performance, water-based polyvinyl acetate homopolymer emulsion explicitly engineered as a high-tier binder for waterborne paints, architectural coatings, and industrial wood or packaging adhesives. It offers an optimal balance of structural strength, mechanical stability, and compounding versatility.

1. Typical Physical & Chemical Specifications

Appearance	Milky white, homogeneous liquid
Solid Content (%)	50.0% ± 1.0%
Viscosity (25°C, Brookfield)	12,000 – 18,000 mPa·s
pH Value	4.5 – 6.0
Minimum Film Forming Temp.	Approx. +5°C (MFFT)
Particle Size	0.5 – 2.0 microns
Ionic Charge	Anionic / Non-ionic
Free Monomer Content	< 0.3%

2. Key Performance Benefits

In Paint & Coating Applications:

- **Superior Pigment Binding:** Exhibits excellent pigment volume concentration (PVC) capacity, ensuring vivid color retention and distribution.
- **Enhanced Durability & Scrub Resistance:** Forms a tough, cohesive film that significantly improves the scrubability and washability of interior architectural paints.
- **Optimized Rheology & Flow:** Contributes to excellent leveling and brushability, reducing spatter during roller applications.
- **UV and Yellowing Resistance:** Formulated to maintain film clarity and resist degradation or yellowing when exposed to indoor UV elements.

In Adhesive Applications:

- **High Green Strength & Fast Setting:** Offers aggressive initial tack and quick setting times, accelerating assembly processes in carpentry and packaging lines.
- **Exceptional Tensile Bond Strength:** Deeply penetrates porous substrates (wood, paper, fiberboard) to produce a fiber-tearing bond that often outlasts the substrate itself.
- **Excellent Shear Stability:** Maintains structural integrity under high-speed mechanical agitation or mechanical spreading equipment.
- **Plasticizer Compatibility:** Seamlessly blends with standard external plasticizers or coalescent solvents to modify open times or film flexibility as required.

3. Product Applications & Usage

- **Waterborne Interior Paint:** Primary binder for economy-to-premium eco-friendly flat, matt, and semi-gloss emulsions.
- **Woodworking & Joinery:** Assembly glues, doweling, finger-jointing, and furniture lamination.
- **Packaging & Paper Converting:** High-speed carton sealing, paper bag manufacturing, and tube winding.

Storage & Handling: Store in original, tightly sealed containers at temperatures between 5°C and 35°C. Avoid exposure to direct sunlight and freezing conditions. Under proper storage conditions, the shelf life is 12 months from the date of manufacture.

Disclaimer: The information provided in this Technical Data Sheet is based on our current laboratory trials and practical experience. Since the conditions of product application are beyond our control, users are strongly encouraged to conduct comprehensive trials to verify suitability for their specific processing parameters and final performance requirements.