

# ® Polyfam 301

## Technical Data Sheet

### Characteristics

®Polyfam 301 is an aqueous non-plasticized dispersion based on vinyl acetate.

### Stabilization

Polyvinyl alcohol

### Recommended Application Areas

Wood glues  
Paper and packaging adhesives  
Non woven finishing

### Specification

These technical data are determined for each batch before its release by our quality control laboratory.

	Unit	Value	Dev.
<b>Solids content</b> (ISO 3251: 1h; 105 °C)	%	50 ±	1
<b>Viscosity</b> (ISO 2555; Spindle no. 7; 20 rpm; 23 °C) Brookfield-viscometer RVT	mPa.s (cP)	120000 ±	20000
<b>pH value</b> (ISO 976)		4.0 ±	1.0

### Additional Data

These data are solely to describe the product. They are not subject to constant monitoring or part of the specification.

	Unit	Value
<b>Dispersion</b>		
<b>Minimum film forming temperature (MFFT)</b> (ISO 2115)	°C	approx 14
<b>Density</b> (ISO 2811)	g/cm <sup>3</sup>	approx 1.06
<b>Film *</b>		
<b>Appearance</b>		slightly opaque, tack-free
<b>Hardness, Koenig (ISO 1522)</b>	s	209

\*Force dried at 60°C for 2hr and at 21°C for 24hr and 53% relative humidity (ISO 3270)  
Tested at 23°C and 53% relative humidity (ISO 3270)

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

## Applications

®Polyfam 301 shows a rapid increase in bond strength. The dispersion is therefore particularly suitable for the manufacture of fast-setting wood glues and paper adhesives.

Adhesives based on ®Polyfam 301 are especially suitable for dowel or assembly glues for seating furniture. ®Polyfam 301 is not suitable for exterior applications. The film reemulsifies.

## Processing

The minimum film forming temperature (MFFT) of ®Polyfam 301 can be lowered by high-boiling solvents such as ®Texanol, butyl diglycol acetate or plasticizers.

To ensure an adequate storage stability, long term storage trials are recommended at any rate, especially when fillers with a large specific surface area are chosen. In addition to the widespread used polyphosphates, the salts of low molecular weight polyacrylic acids (e.g. ®Polyfam 101) working as dispersing agents, should also be used to achieve further stability.

Many thickeners are usable to adjust the desired viscosity of the adhesive and to improve its processability. Very good results are achieved by employing ®Tylose grades of the H and MH series with retarded swelling behavior and medium to high molecular weight. Using acrylic thickeners such as ®Polyfam 103 with higher thickening efficiency and lower water absorption, is sometimes preferred.

A good compatibility exists with plasticizers like the commonly used phthalates, but also with the commonly used benzoate plasticizers.

When necessary, the recommended defoamers for polymer dispersions may be used. Compatibility, however, should be checked prior to use.

## Preservation and Storage

The dispersion contains some initial preservatives to prevent attack by micro organisms. In order that the product is also sufficiently protected against microbial contamination during further storage in opened drums or storage tanks, a suitable preservative should be added despite our preliminary preservation measures.

Prior to use, ®Polyfam 301 should be stored for no longer than 6 months at temperatures as constant as possible between 0 and 35 °C and must be protected from frost and direct exposure to sunshine. Furthermore, it must be ensured that already opened drums or containers are always tightly closed.

The technical data ascertained by our quality control laboratory at the time of product release may vary according to the storage conditions and may deviate from the stated limits.

## Industry Safety and Environmental Protection

Not a hazardous substance.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.