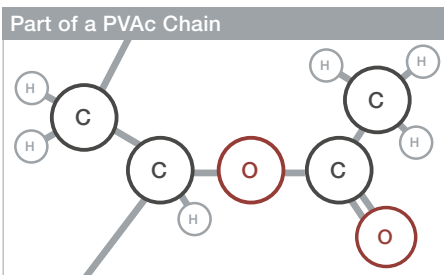


# VINNAPAS® DPX 271

## Low-Formaldehyde Binder for Water-Resistant Wood Glues (D3)

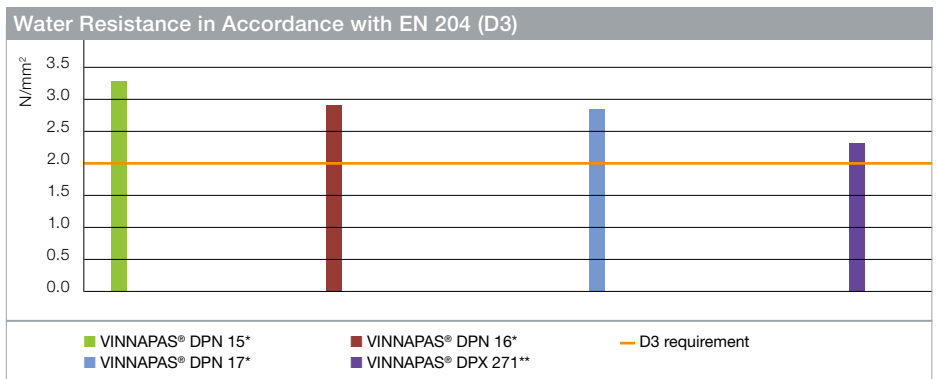
Waterborne wood adhesives are usually based on PVAc homopolymer dispersions. For water-resistant wood glues, reactive co-monomers are traditionally incorporated as internal crosslinkers to fulfill the requirements of the EN 204 D3 class. These co-monomers release formaldehyde upon crosslinking and need an acid catalyst which may cause discoloration of the wood.

With VINNAPAS® DPX 271, WACKER has developed a wood adhesive that displays water resistance as per EN 204 (D3) without a reactive co-monomer. Consequently, VINNAPAS® DPX 271 enables high water resistance without the release of formaldehyde in the crosslinking reaction.

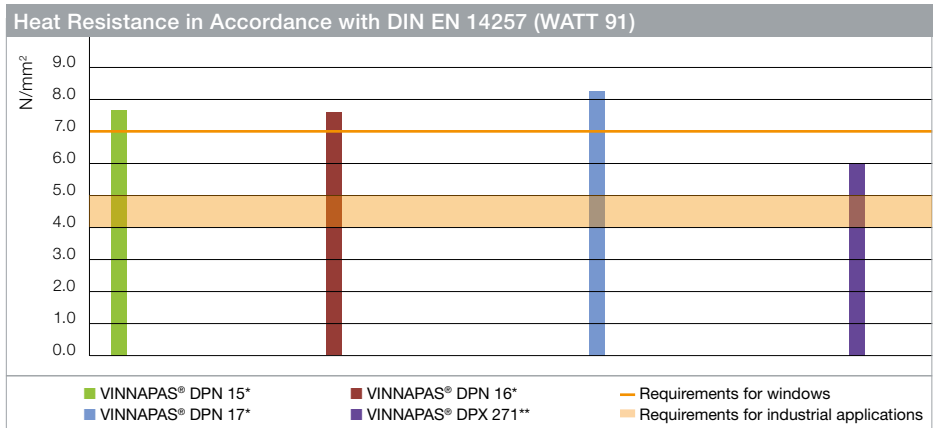


DPX technology provides water resistance in PVAc-based adhesives without formaldehyde-emitting components.

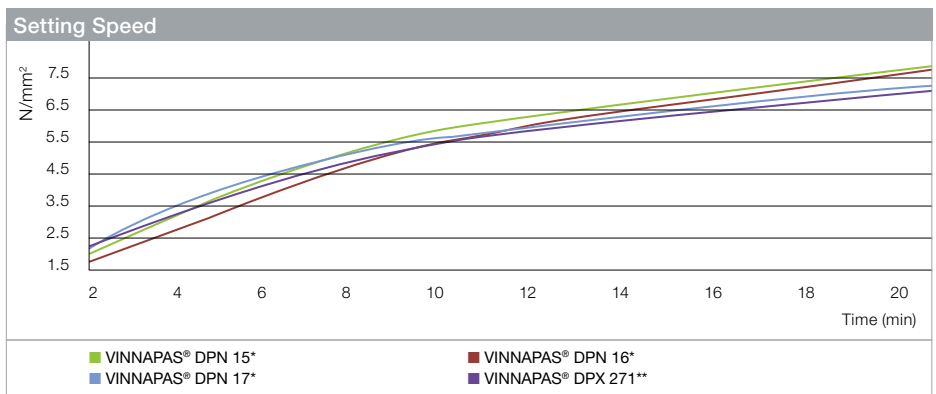
Technical Properties of VINNAPAS® DPX 271	
Solids content	46 ± 2
Viscosity (Brookfield, 20 rpm, at 23 °C)	10,000 ± 4,000
pH	5 - 6
D3	> 2 N/mm <sup>2</sup>
WATT 91	Approx. 5 N/mm <sup>2</sup>
Formaldehyde level	< 5 ppm



\* Traditional technology \*\* WACKER DPX technology

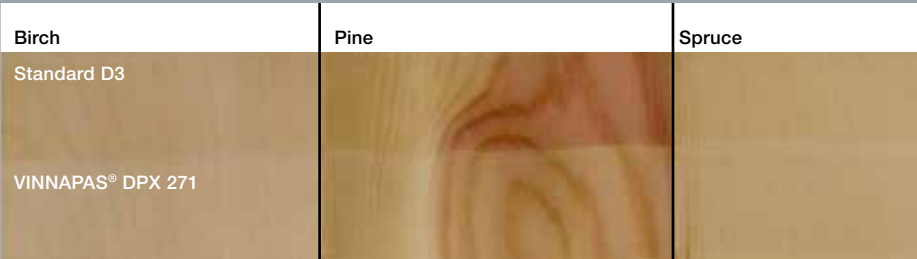


\* Traditional technology \*\* WACKER DPX technology



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### Comparison with a Standard D3 Wood Glue: VINNAPAS® DPX 271 Shows No Discoloration

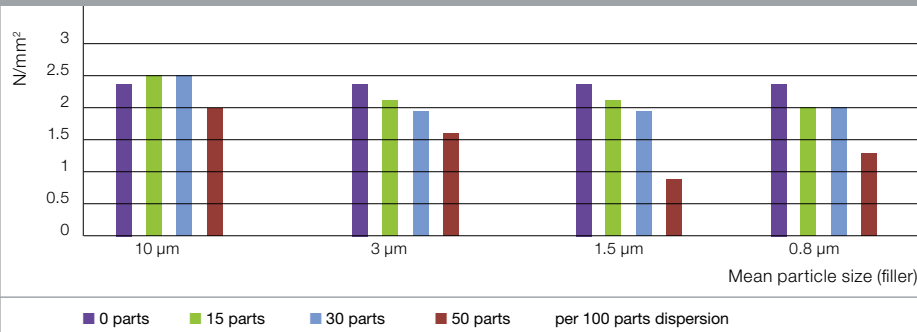


### Advantages of VINNAPAS® DPX 271

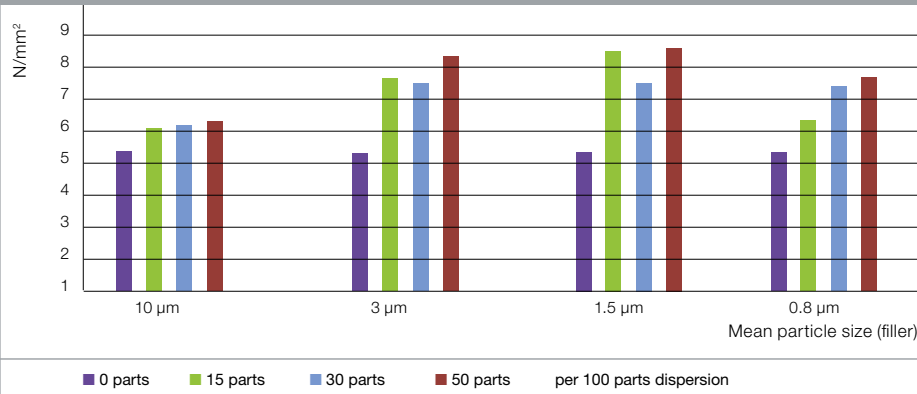
VINNAPAS® DPX 271 offers two main advantages compared to standard D3 wood adhesives: high water resistance without formaldehyde-emitting chemistry, and low discoloration due to absence of an acid catalyst.

Additionally, VINNAPAS® DPX 271 can be formulated with calcium carbonate fillers, thereby providing economic advantages in the final adhesive formulation. Depending on the filler level and particle size of the filler, the water resistance is comparable to or only slightly lower than that of unfilled wood glues. On heat resistance, the addition of filler even has a positive influence.

### High Filler Acceptance – D3 Water Resistance in Accordance with EN 204 of Formulations Including Fillers



### High Filler Acceptance – Good Heat Resistance in Accordance with DIN EN 14257 (WATT 91) of Formulations Including Fillers



### VINNAPAS® DPX 271 at a Glance

- No formaldehyde-emitting chemistry
- Low formaldehyde content (< 5 ppm)
- High water resistance
- High heat resistance
- Fast setting
- No discoloration
- High tolerance to fillers



VINNAPAS® Plus dispersions feature advanced properties for high-end formulations. Find out more at [www.wacker.com/value-classes](http://www.wacker.com/value-classes).

Note: Formulations with VINNAPAS® DPX 271 require new certificates in order to confirm the fulfillment of EN 204 D3 water resistance for each individual formulation.

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The data presented in this information sheet are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this information sheet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.