

VINNAPAS® EP6300

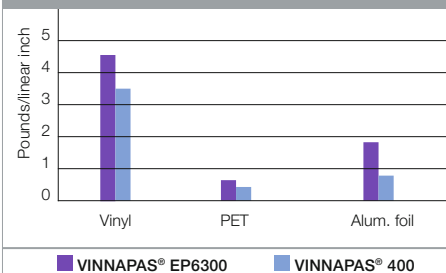
A High-Solids Carboxylated VAE for Specialized Adhesive Applications

With VINNAPAS® EP6300, WACKER offers the waterborne adhesives industry a high-solids carboxylated vinyl acetate-ethylene (VAE) dispersion with excellent adhesion to films and metals, along with excellent cohesive film strength. The dispersion exhibits high wet tack and excellent mechanical stability and has a relatively low plasticizer response for the development of high-solids, moderate-viscosity adhesives.

VINNAPAS® EP6300 is an Excellent Base for a Wide Variety of Applications

Similar to other lower Tg VAE copolymers, VINNAPAS® EP6300 is a good choice for bonding plastic films to porous or cellulosic surfaces. However, due to the carboxyl functionality of the polymer, VINNAPAS® EP6300 is also an excellent base for metal adhesion in general and aluminum foil lamination.

Peel Adhesion of VINNAPAS® EP6300 Versus VINNAPAS® 400, an Established Benchmark



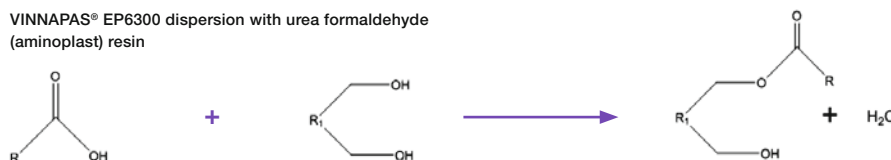
In addition to adhesion to metal surfaces, the carboxylation also adds reactive sites for crosslinking as well as a means for thickening.

Properties of VINNAPAS® EP6300	
Solids (wt. %)	62 – 64
Viscosity (mPa.s)	600 – 1,500
pH	4.3 – 5.3
Tg (°C)	-3 – 3

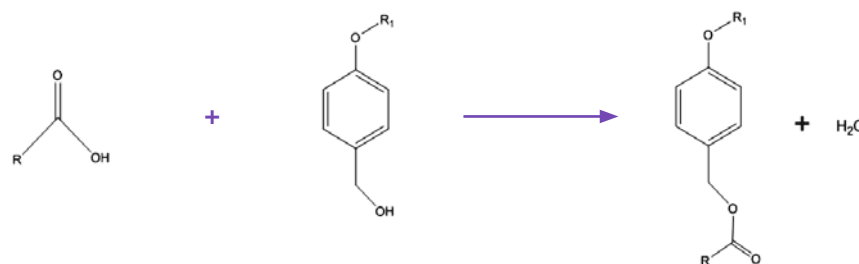
VINNAPAS® EP6300 will react with aminoplast, phenolic and epoxy resins. Its performance with these various crosslinkers will vary, but in general properties like water resistance, creep resistance, and heat resistance will improve. It is important to know the specific impact of the various crosslinkers in order to maximize the desired performance.

Reactions of a Carboxylated Vinyl Acetate-Ethylene Dispersion

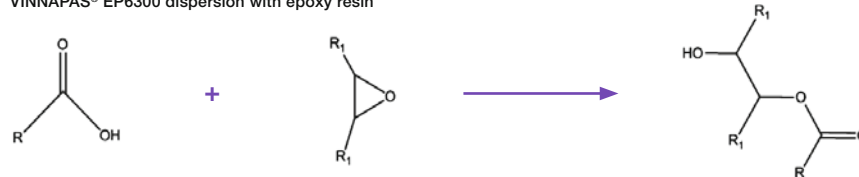
VINNAPAS® EP6300 dispersion with urea formaldehyde (aminoplast) resin



VINNAPAS® EP6300 dispersion with phenolic resin

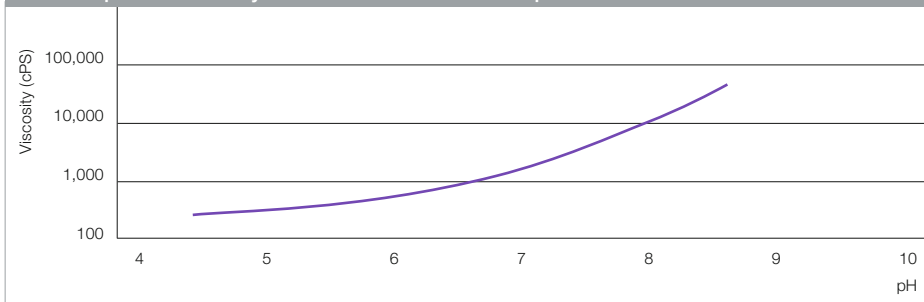


VINNAPAS® EP6300 dispersion with epoxy resin



VINNAPAS® Plus dispersions feature advanced properties for high-end formulations. Find out more at www.wacker.com/value-classes



Effect of pH on Viscosity of VINNAPAS® EP6300 Dispersion

Raising the pH of VINNAPAS® EP6300 will increase its viscosity and further improve its adhesion to metals such as aluminum. However, this will also drastically reduce its water resistance.

At a Glance: VINNAPAS® EP6300 Benefits

- High-solids with carboxyl functionality
- Moderate viscosity with low plasticizer response for developing high-solids, moderate-viscosity adhesives
- Excellent adhesion to films and metals
- Very fast setting speed
- High wet tack
- Very good machining characteristics
- Good film clarity
- Compatible with other latex dispersions, epoxy resins, and waterbased urethane dispersions
- Suitable for high-solids, high-performance waterborne adhesives such as vinyl laminating, plastic bottle labeling, and construction and flooring applications
- Accepts high loadings of clay, calcium carbonate and other fillers

VINNAPAS®

Wacker Química do Brasil Ltda., 06612-060 Jandira – São Paulo, Brazil
Tel. +55 11 4789-8300, info.brazil@wacker.com

Wacker Mexicana, S.A. de C.V., Col. Tizapán, 01090 México, D.F., Mexico
Tel. +52 55 9136-5258, info.mexico@wacker.com
www.wacker.com/adhesives, www.wacker.com/vinnapas

The data presented in this brochure 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 brochure 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.