



# VINNAPAS® EF 104 VAE BINDER FOR PAPERBOARD COATINGS

WACKER, the leader in vinyl acetate-ethylene (VAE) dispersions, has developed a new VAE binder that shows outstanding performance in paperboard coating applications.

## VINNAPAS® EF 104 – For High Performance Paperboard Coatings

Thanks to innovative polymer modifications, VINNAPAS® EF 104 is the first binder based on vinyl acetate-ethylene copolymers (VAE) to offer a range of performance properties that has so far only been possible with alternative systems. VINNAPAS® EF 104 formulates well and exhibits good runnability. Coatings produced with VINNAPAS® EF 104 provide good calendered sheet gloss, brightness and high opacity as required by demanding paperboard applications.

### Typical Properties of VINNAPAS® EF 104

Solids [wt. %]	55
Viscosity [cPs]	400
pH	5.0
Particle size [nm]	230
Tg [°C]	14

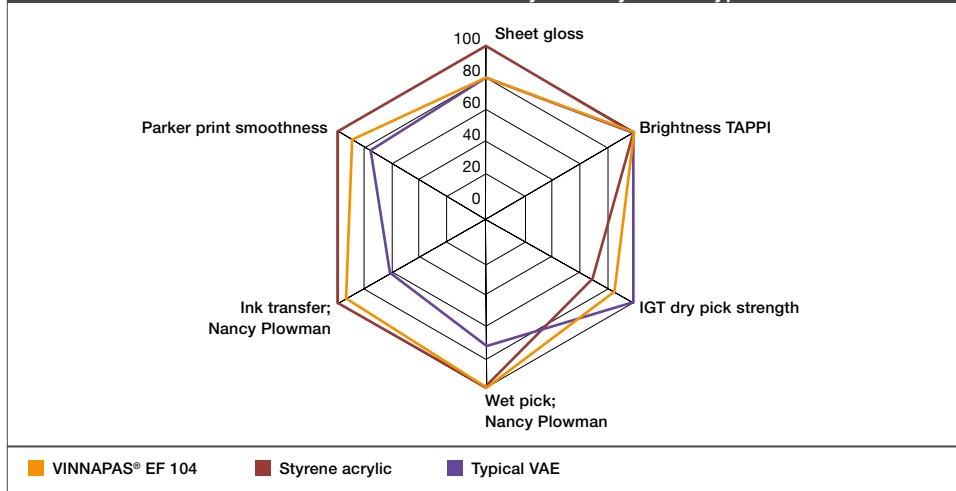
### Main Properties of VINNAPAS® EF 104

- Good rheology on all types of coating applicators
- Excellent gloss and opacity
- Good dry pick and wet pick performance
- Excellent brightness, printability and glueability
- Compliance with food contact regulations



The new VINNAPAS® EF 104 grade is an ideal binder for high-quality coated paperboard packaging: from folding cartons for personal care and pharma products to printed paperboard for food and beverage packaging.

### Relative Performance of VINNAPAS® EF 104 vs. Styrene Acrylic and Typical VAE



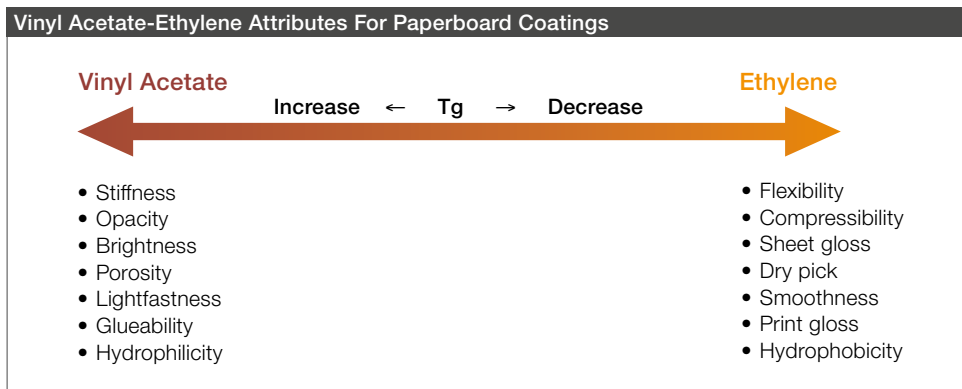


**Leading in VAE Dispersions**

WACKER scientists started researching polymer binders back in the 1920s. From the 1960s on, they set out to develop copolymer dispersions based on vinyl acetate and ethylene. Today we are the world's leading producer of dispersions based on vinyl acetate-ethylene, with production facilities in Europe, Asia, and North America. Our portfolio of specialty dispersions for use in paper and paperboard applications is characterized by high quality, versatility and cost-effectiveness.

**Benefit From Extensive Applications Support ...**

Our longstanding hands-on expertise, combined with the latest advances in polymer technology, allows us to match the best dispersion to your particular needs. We provide customized technical solutions that support your requirements.



**... And Comprehensive Technical Service**

In our paper applications laboratory in Allentown, Pennsylvania, we make use of state-of-the-art analytical equipment. Capabilities include IR spectroscopy, particle-size and rheology measurements, dynamic mechanical analysis, and various chromatographic and thermal analyses. Our experienced technical staff also provides on-site customer service, new product introductions, mill-trial support, information exchange and troubleshooting.

WACKER is a pioneer in vinyl acetate-ethylene technology. We look forward to sharing our experience and expertise with you.



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