

WACKER

CREATING TOMORROW'S SOLUTIONS

VINNAPAS®

PRIMIS®



ARCHITECTURAL COATINGS | POLYMER DISPERSIONS | SOUTH EAST ASIA

PRODUCT OVERVIEW

POLYMER CHEMISTRY – A KEY TO QUALITY

Polymer binders enhance two critical characteristics of all mortars and coatings: adhesion and flexibility. They ensure the quality of buildings and prolong their life expectancy while reducing material consumption. At the same time, they increase creative freedom by making it possible to combine a wide variety of construction materials.

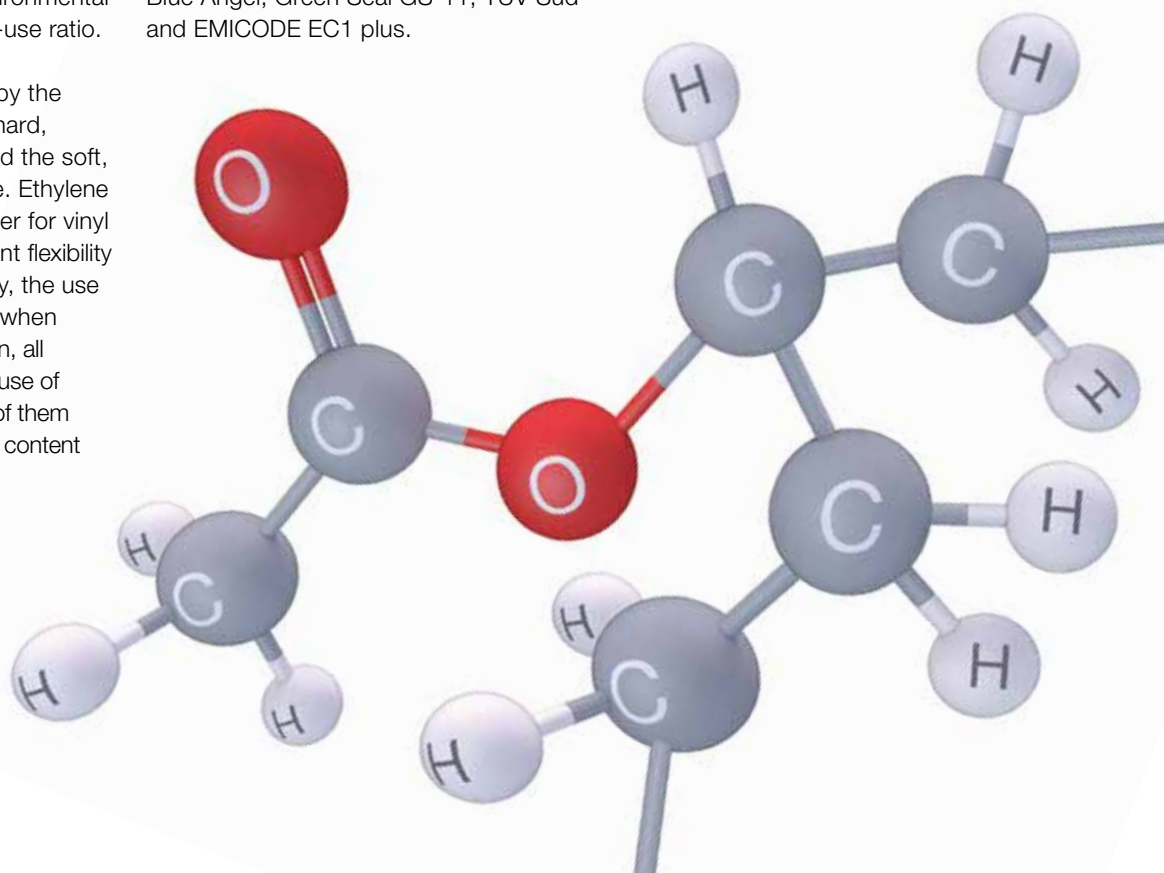
Vinyl Acetate-Ethylene (VAE) – Serving the Megatrends of Today and Tomorrow

VINNAPAS® dispersions are co- and terpolymers based on vinyl acetate, ethylene and other monomers. Vinyl acetate-ethylene (VAE), in particular, combines technical performance with environmental benefits at an attractive cost-in-use ratio.

VAE dispersions are produced by the emulsion polymerization of the hard, polar monomer vinyl acetate and the soft, hydrophobic monomer ethylene. Ethylene functions as an optimal flexibilizer for vinyl acetate, incorporating permanent flexibility into VAE polymers. Consequently, the use of plasticizers can be minimized when formulating with VAEs. In addition, all grades are stabilized without the use of APEO-based surfactants, many of them also show low residual monomer content (<500 ppm).

Compliance with Strict Labels

With our cutting-edge VINNAPAS® VAE binders, the construction and paint industries are equipped to meet stringent governmental regulations, as well as the requirements of internationally recognized ecolabels and certifications, such as Blue Angel, Green Seal GS-11, TÜV Süd and EMICODE EC1 plus.



THE FAST TRACK – PRODUCT FINDER

Grade	Typical General Properties ¹							
	Polymer Base ²	Solids Content ±1% ³ [%]	Viscosity, Brookfield [mPa·s]	pH Value	Glass Transition Temperature T _g (DSC) ⁵ [°C]	Minimum Film-Forming Temperature [°C] (ISO 2115) ⁵	Predominant Particle Size ⁵ [µm]	Stabilization System ⁴
VINNAPAS® EF 818	VAc-E	55	150–650	4.0–6.0	7	0	0.22	ST
VINNAPAS® EF 3777	VAc-E	56	150–1,850	3.5–5.5	10	1	0.20	ST
VINNAPAS® EP 3360 (ULS)	VAc-E	60	3,000–6,000	5.0–8.0	10	2	0.50	PVOH & ST
VINNAPAS® EZ 3067	VAc-E	55	2,000–7,000	4.5–5.5	6	1	0.40	CD & ST
VINNAPAS® EAF 380	VAc-E-A	51	600–1,600	7.0–9.0	12	8	0.30	ST
VINNAPAS® CEZ 3031	VAc-E-VC	50	6,000–12,000	4.0–5.0	7	2	0.70	CD & ST
VINNAPAS® EZ 3112	VAc-E-VE	50	1,800–4,000	4.5–5.5	9	0	0.40	CD & ST
PRIMIS® SAF 9000 ⁶	S-A	42	50–500	6.5–7.5	21	13	< 0.10	ST
PRIMIS® AF 1000	A	42	70–150	8.0–9.0	20	9	< 0.10	ST

¹ These figures are only intended as a guide and are not part of supply specifications.

² VAc = vinyl acetate
A = acrylate
E = ethylene
S = styrene
VC = vinyl chloride
VE = VERSA® vinyl ester

³ Residue after drying

⁴ PVOH = polyvinyl alcohol
CD = cellulose derivative
ST = surfactant

⁵ Approximately

⁶ Recommended as co-binder

THE PERFECT FIT – RECOMMENDATION BY APPLICATION

Grade	Recommended Applications								
	Interior Paints			Easy-to-Clean Paints	Exterior Paints			Intumescent & Fire-Resistant Paints	
	Low PVC	Medium PVC	High PVC		Masonry Paints	Textured Paints	Elastomeric/Crack-Bridging Paints	Intumescent Paints	Fire-Resistant Paints
VINNAPAS® EF 818	○	○							
VINNAPAS® EF 3777		●	●						
VINNAPAS® EP 3360 (ULS)		●	●						
VINNAPAS® EZ 3067							●		
VINNAPAS® EAF 380	●	●							
VINNAPAS® CEZ 3031	●	○		●	●	●		●	
VINNAPAS® EZ 3112							●		
PRIMIS® SAF 9000*				●	●				
PRIMIS® AF 1000				●	●				

● Highly recommended

○ Recommended

*Recommended as co-binder

Interior Paints

Grade	Product Benefit	Performance Attributes			
		Scrub Resistance	Gloss Development	Block Resistance	Compatibility with Tinting Systems
VINNAPAS® EP 3360 (ULS)	Excellent scrub resistance and high solids content, supports modern manufacturing processes.	●			●
VINNAPAS® EF 818	Standard binder with excellent abrasive scrub resistance.	○	○	○	●
VINNAPAS® CEZ 3031	Premium binder for interior and exterior paints with good fire-resistant properties.	○	○		●
VINNAPAS® EAF 380	Premium binder for interior paints especially suitable for silk and gloss paints as well as easy-to-clean paints.	○	●	●	●
VINNAPAS® EF 3777	High-performance binder for silk paints, very versatile.	○	●	●	●

Easy-to-Clean Paints

Grade	Product Benefit	Performance Attributes		
		Stain Resistance	Resistance to Dirt Pick-Up	Compatibility with Other Binders
PRIMIS® SAF 9000	High-performance additive used as a co-binder to increase stain resistance and easy-to-clean properties of low to medium PVC interior paints. Compatible with a broad range of main binders.	●	●	●

Exterior Paints

Grade	Product Benefit	Performance Attributes						
		Resistance to Dirt Pick-Up	Hydrophobicity/Water Resistance	Flexibility	Color Stability	Saponification/Alkaline Resistance	Flame Resistance	Durability
PRIMIS® AF 1000	State-of-the-art exterior binder with very low dirt pick-up and very high color stability.	●	●	●	●	●	○	●
VINNAPAS® CEZ 3031	Broad utility binder with excellent color stability.	○	○	●	●	●	●	●
PRIMIS® SAF 9000	High-performance additive used as a co-binder to reduce snail trails and leaching of water-soluble additives in general. Compatible with a broad range of main binders.	●	●	N.A.	N.A.	N.A.	N.A.	N.A.

● Excellent ○ Good

Intumescent Coatings

Grade	Product Benefit	Performance Attributes				
		Foam Development	Foam Stability/ Integrity	Paint Storage Stability under Demanding Conditions	Broad Formulation Ability	Dry Film Thickness (DFT) Efficiency
VINNAPAS® EZ 3112	Premium binder that combines maximum performance with an extremely broad range of applications.	●	●	●	●	●
VINNAPAS® EZ 3067	Standard binder for high-performance intumescent coatings.	○	●	○	○	○

Fire-Resistant Paints

Grade	Product Benefit	Performance Attributes		
		Flame Retardancy	Hydrophobicity	Flexibility
VINNAPAS® CEZ 3031	General-purpose binder with good fire-resistant properties.	○	○	●

● Excellent ○ Good

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