

WACKER

CREATING TOMORROW'S SOLUTIONS

PRIMIS®

VINNAPAS®

CONSTRUCTION | POLYMER DISPERSIONS | NORTH EAST ASIA

PRODUCT OVERVIEW POLYMER DISPERSIONS



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.

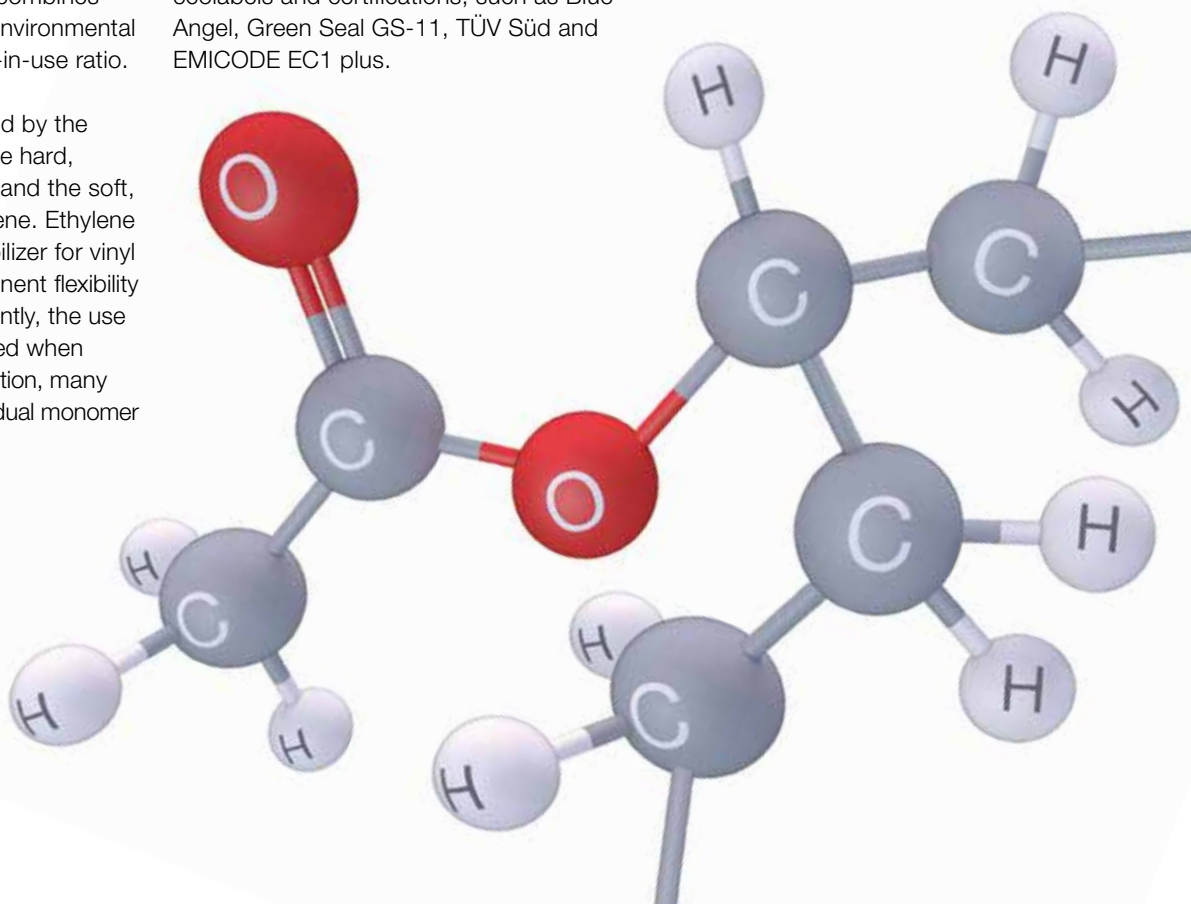
Vinyl Acetate-Ethylene (VAE) – Serving the Megatrends of Today and Tomorrow

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, many of our products show low residual monomer content (<500 ppm).

Compliance with Strict Labels

With our cutting-edge VINNAPAS® VAE binders, the construction and paints 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 (ISO 2115) ⁵ [°C]	Predominant Particle Size ⁵ [µm]	Stabilization System ⁴
VINNAPAS® 529 ED	VAc-E	55	2,700–3,700	4.0–6.0	7	0	1	PVOH
VINNAPAS® 536 ED	VAc-E	63	200–800	6.0–7.5	7	0	0.5–1.0	PVOH & ST
VINNAPAS® 544 ND	VAc-E	55	1,900–2,800	4.0–6.0	0	0	1	PVOH
VINNAPAS® 545 ND	VAc-E	55	2,900–3,900	4.0–6.0	0	0	1	PVOH
VINNAPAS® 546 ND	VAc-E	55	3,500–4,500	4.0–6.0	0	0	1	PVOH
VINNAPAS® 547 ED	VAc-E	55	1,300–2,000	4.0–6.0	0	0	1	PVOH
VINNAPAS® 548 ND	VAc-E	55	4,400–5,400	4.0–6.0	0	0	1	PVOH
VINNAPAS® 561 ED	VAc-E	55	2,000–4,000	4.0–6.0	-10	0	1	PVOH
PRIMIS® SAF 9000	S-A	42	50–500	6.5–7.5	21	13	<0.1	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

³ Residue after drying

⁴ PVOH = polyvinyl alcohol

ST = surfactant

⁵ Approximately

Grade	Recommended Applications						
	Waterproofing Membranes	Bonding Agents/ Primers/Surface Treatment	Skim Coat/ Putty/ Joint Compounds	Cement Admixtures	Tile Adhesives	ETICS (Top Coat, Adhesive Mortar, Base Coat)	Non-combustible EPS
VINNAPAS® 529 ED	○	●		●	●	●	
VINNAPAS® 536 ED	●	●	●	●			
VINNAPAS® 544 ND				○			
VINNAPAS® 545 ND		○		○			
VINNAPAS® 546 ND	○	○		○			●
VINNAPAS® 547 ED	○	○		○		●	○
VINNAPAS® 548 ND	○	○		○			●
VINNAPAS® 561 ED	●			●	●	●	
PRIMIS® SAF 9000		●					

● Highly recommended

○ Recommended

THE PERFECT FIT – RECOMMENDATION BY APPLICATION

Waterproofing Membranes

Grade	Product Benefit	Flexibility	Adhesion on Critical (Esp. Organic) Surfaces
VINNAPAS® 529 ED	General purpose product for rigid, cementitious waterproofing membranes.		●
VINNAPAS® 536 ED	Excellent compatability with cement with outstanding workability.		●
VINNAPAS® 546 ND	High viscosity product with good workability.	○	○
VINNAPAS® 547 ED	Medium viscosity product with for general purpose waterproofing membranes.	○	○
VINNAPAS® 548 ND	Product with high viscosity and medium hardness.	○	○
VINNAPAS® 561 ED	Low T _g product with excellent elongation properties.	●	●

Bonding Agents / Primers

Grade	Product Benefit	Performance Attributes				
		Penetration	Surface Consolidation	Adhesion on Critical Substrates	Flexibility	Water Resistance
PRIMIS® SAF 9000	Ultra high penetration primer and surface finish.	●	●	●	○	●
VINNAPAS® 529 ED	High T _g product with excellent adhesion and high bonding strength.	●	●	●	●	○
VINNAPAS® 536 ED	Product with high solid content, good compatability with cement and high bonding strength.	●	●	●	●	○
VINNAPAS® 545 ND	High viscosity product with good dispersing properties with cement.	○	○	○	●	○
VINNAPAS® 546 ND	High viscosity product for geneneral purpose.	○	○	○	●	○
VINNAPAS® 547 ED	Product with medium viscosity and good cement compatibility.	○	○	○	●	○
VINNAPAS® 548 ND	Very high viscosity product to minimize the use of thickening agent.	○	○	○	●	○

● Excellent ○ Good

Surface Treatment

Grade	Product Benefit	Performance Attributes		
		Stain Resistance	Abrasion Resistance	Hydrophobicity
PRIMIS® SAF 9000	Ultra high penetration with great stain resistance and mechanical stability.	●	●	●

Skim Coat/Putty/Joint Compounds

Grade	Product Benefit	Performance Attributes		
		Adhesion	Workability	Flexibility
VINNAPAS® 536 ED	High solid content and excellent workability for skim coats.	●	●	○

● Excellent ○ Good

Cement Admixtures

Grade	Product Benefit	Performance Attributes			
		Flexibility	Adhesion	Hydrophobicity	Flexural Strength
VINNAPAS® 529 ED	Higher T_g product for general purpose cement admixtures.	○	●	○	●
VINNAPAS® 536 ED	High solid content with excellent adhesion properties and high filler acceptance.	○	●	●	●
VINNAPAS® 544 ND	General purpose product.	○	●	○	●
VINNAPAS® 545 ND	High viscosity product with good dispersing properties with cement.	○	●	○	●
VINNAPAS® 546 ND	High viscosity product for general purpose.	○	●	○	●
VINNAPAS® 547 ED	Product with medium viscosity and good cement compatibility.	○	●	○	●
VINNAPAS® 548 ND	Very high viscosity product to minimize the use of thickening agent.	○	●	○	●
VINNAPAS® 561 ED	Very low T_g product with excellent elongation property.	●	●	○	●

Tile Adhesives

Grade	Product Benefit	Performance Attributes		
		Compatibility with Cement	Filler Load	Slip Resistance
VINNAPAS® 529 ED	General purpose product for 2K cementitious tile adhesives.	●	●	●
VINNAPAS® 561 ED	Very low T_g product with excellent adhesion properties.	●	●	○

● Excellent ○ Good

Plaster / Render / Top Coats for ETICS

Grade	Product Benefit	Performance Attributes			
		Resistance to Dirt Pick-Up	Color Stability	Durability	Flexibility
VINNAPAS® 529 ED	High T _g product with outstanding surface smoothness, anti-cracking properties and trowel workability.	●	●	●	
VINNAPAS® 547 ED	Medium T _g product with outstanding surface smoothness, anti-cracking properties and trowel workability.	●	●	●	○
VINNAPAS® 561 ED	Low T _g product especially suitable for renders.	●	●	●	●

ETICS – Adhesives & Base Coats

Grade	Product Benefit	Performance Attributes			
		Flame Resistance	Flexibility	Hydrophobicity	Compatibility with Cement
VINNAPAS® 529 ED	High T _g product with very good workability and excellent adhesion to EPS panels.	●	○	○	●
VINNAPAS® 547 ED	Medium T _g product with low viscosity for good dispersing properties with cement.	●	○	○	●
VINNAPAS® 561 ED	Low T _g product for improved elasticity and excellent adhesion to EPS panels.	●	●	○	●

Non-Combustible EPS

Grade	Product Benefit	Performance Attributes			
		Bonding with EPS	Char formation	Productivity	Reduction in heat emission
VINNAPAS® 546 ND	High viscosity product exhibiting excellent adhesion to EPS and inorganic flame retardants.	●	●	○	●
VINNAPAS® 547 ND	Medium viscosity product exhibiting good adhesion to EPS and inorganic flame retardants.	○	○	○	●
VINNAPAS® 548 ND	Product with very high viscosity and excellent adhesion to EPS and inorganic flame retardants.	●	●	○	●

● Excellent ○ Good



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