

VINNAPAS® DISPERSIONS FOR WATERPROOFING MEMBRANES, BONDING AGENTS AND CEMENT ADMIXTURES

Vinyl acetate-ethylene copolymer dispersions stand for reliable barriers against water, even under pressure and at low temperatures.

VINNAPAS®-modified waterproofing membranes reliably keep water out and in. These highly elastic membranes are also able to bridge cracks.

General Benefits of Polymer Modification with VINNAPAS®

- Improvement of adhesion and cohesion
- Significant increase in flexibility
- High resistance to hydrostatic water pressure
- Significant increase of crack-bridging ability even at low temperatures
- Vapor permeability
- Excellent compatibility with cement
- Low odor (no ammonia release)

Application Spectrum

- One-component, ready-to-use waterproofing membranes (1K WPM)
- Two-component, cementitious waterproofing membranes and mortar (2K cementitious WPM)
- Waterproofing membranes for all kinds of wet areas (e.g. bathrooms, swimming pools and wellness areas) and for wastewater drains, water reservoirs and tanks
- Ready-to-use mortar for gypsum boards
- Bonding agents / cement admixtures

Setting the Standard

VINNAPAS® grades additionally improve mechanical properties and stay highly elastic even at low temperatures. They can be used to formulate two-component, cementitious as well as one-component waterproofing membranes.



Adhesion testing

Superior Tensile Adhesion Strength and Crack-Bridging Ability

Our product portfolio comprises VINNAPAS® 536ED, 547ED and 551ED – all vinyl acetate-ethylene (VAE) copolymer dispersions. The vinyl acetate content secures stiffness and adhesion, while the ethylene content provides flexibility. This results in a combination of tensile adhesion strength and crack-bridging ability that is superior to that of traditional products based on styrene acrylics – and is especially valuable for waterproofing membranes.



Elongation and tensile strength testing

Product Recommendation					
	Product Benefit	Performance Attributes in Cementitious Systems			
		Adhesion	Elongation	Workability	Crack-Bridging
VINNAPAS® 536ED	Highly versatile product with excellent crack-bridging properties, adhesion, cohesion and water resistance	● ● ●	● ● ●	● ● ●	● ● ●
VINNAPAS® 547ED	Standard grade for waterproofing membranes with excellent balance of adhesion and cohesion	● ●	● ●	●	● ●
VINNAPAS® 551ED	Highly flexible product with excellent crack-bridging properties recommended for plasticizer-free formulations	● ● ●	● ●	● ●	● ●

●● Excellent ●● High ● Good

Typical Product Properties								
	Polymer Base ¹	Solids Content ³	Viscosity, Brookfield (mPa.s)	pH	Glass Transition Temperature Tg (DSC) ⁴	Minimum Film-Forming Temperature (ISO 2115) ⁴	Predominant Particle Size ⁴	Stabilization System ²
VINNAPAS® 536ED	VAc-E	~63%	200–1,000	6–8	8 ± 2 °C	0 °C	1,000 nm	ST/PVOH
VINNAPAS® 547ED	VAc-E	~55%	1,300–2,000	4–6	0 ± 2 °C	0 °C	1,000 nm	PVOH
VINNAPAS® 551ED	VAc-E	~55%	200–1,000	4–6	-10 °C	0 °C	1,000 nm	PVOH

¹ VAc = vinyl acetate
E = ethylene

² PVOH = polyvinyl alcohol
ST = surfactant

³ Residue after drying

⁴ Approximately

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

Wacker Chemicals Korea Inc., Gyeonggi-do, South Korea, Tel. +82 31 697-7200, info.korea@wacker.com
 Wacker Chemicals (South Asia) Pte. Ltd., Singapore, Tel. +65 6542-6638, info.singapore@wacker.com
 Wacker Chemicals Australia Pty. Ltd., Mulgrave Vic, Australia, Tel. +61 3 9541 8900, info.australia@wacker.com
 Wacker Chemie India Pvt. Ltd., Mumbai, India, Tel. +91 22 42365-500, info.india@wacker.com
 www.wacker.com, www.wacker.com/move-construction, www.wacker.com/socialmedia

