

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N)

Product description

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is characterized by excellent processability and crack-bridging.

Properties

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is a copolymer powder of vinyl acetate and ethylene with excellent saponification resistance that is dispersible in water. The high ethylene content makes the resin soft and elastic. Its glass transition temperature is below the freezing point. VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is stabilized with PVOH and a cationic high-molecular-weight polymer. Compounds modified with VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) exhibit improved adhesion, flexural strength, deformability, abrasion resistance and better workability. VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is ideal for highly polymer-modified cementitious dry-mix mortar formulations. Tremendous ease of processing, excellent adhesion and high flexibility are obtained (e.g. high capacity to bridge sealing-slurry cracks, and high deformability in tile adhesives).

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) contains a fine mineral filler as an anticaking agent. It is free of solvents, plasticizers and film-forming agents.

Special features

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is a dispersible polymer powder with a T_g in the lower range. It has no effect on rheological properties and generates low emissions. It is eminently suitable for formulating highly flexible compounds with very good adhesion to mineral and organic substrates.

Application

For typical application fields of VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) you can refer to the following application table. Please discuss additional applications with your WACKER customer representative.

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contains chloride ions. Consequently, using > 5 wt% VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) per total formulation in applications that are in direct contact with reinforced concrete exceeds the total halogen limit of 0.05 wt% (EN 1504, the relevant construction-sealant test certificate and further relevant specifications). All other regulations - legal and otherwise - must be observed.

Application	Recommendation	Suitability
Waterproofing membranes	Flexible systems	●
	Rigid systems	○
EIFS	Adhesive mortars	●
	Embedding mortars	●
Tile adhesives EN 12004/12002 C1/C2	Thin-bed mortars	○
	Thin-bed mortars, flexible	●
● highly recommended ○ recommended		

Processing

For the production of ready-mixed powders, such as dry mortars, adhesives and troweling compounds, blend VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) with the other dry ingredients in appropriate equipment. Temperatures should not be allowed to rise excessively during mixing because otherwise the dispersible polymer powder could agglomerate and lead to the formation of small lumps of resin. The mortar or troweling compound is prepared for use by adding the recommended amount of water and mixing by hand or machine. Since hand mixing generates little shear force, we recommend allowing the fresh mortar to slake for 5 minutes and then stirring it again. This is usually unnecessary where mechanical mixers are employed.

Storage

VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) should be stored in a cool place and protected against moisture. Since the product is thermoplastic, it should not be subjected to pressure or high temperatures during storage because of the risk of caking. Storage time should not exceed 6 months from receipt of delivery.

Blends with hydraulic binders, fillers and pigments

show better storage stability because these components help to prevent caking. However, blends of this type still have to be protected against moisture.

Packaging

25 kg paper bags.
Big Bags (sizes on request).
Bulk on request.

Additional Information

If VINNAPAS® LL 4040 E (VINNAPAS® LL 4040 N) is used in applications other than those mentioned, the choice, processing and use of VINNAPAS® LL 4040 E

(VINNAPAS® LL 4040 N) is the sole responsibility of the purchaser. All legal and other regulations must be complied with.

Slight discoloration may occur without impairing the product's functionality.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER sales offices or may be printed via WACKER web site www.wacker.com/vinnapas.

Product data		
Specification data	Inspection Method	Value
Solids content	DIN EN ISO 3251	98 - 100 %
Ash Content	specific method	6 - 10 %
Bulk density	DIN EN ISO 60	400 - 550 kg/m³
Typical general characteristics	Inspection Method	Value
Appearance	Visual	white powder
Protective colloid / emulsifier system	specific method	Polyvinyl alcohol and cationic, high-molecular-weight polymer
Particle size	DIN EN ISO 4610	Max. 4 % over 400 µm
Predominant particle size	specific method	0,3 - 8 µm
Minimum film forming temperature	DIN ISO 2115	0 °C
Film properties of the redispersion	specific method	cloudy, flexible

These figures are only intended as a guide and should not be used in preparing specifications.

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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For technical, quality, or product safety questions, please contact:

Wacker Chemie AG
Hanns-Seidel Platz 4
81737 München, Germany
info.polymers@wacker.com
www.wacker.com