

# VINNAPAS® 540 ED (ULS)



# **Polymer Dispersions**

VINNAPAS® 540 ED (ULS) is a medium viscosity polymer dispersion based on vinyl acetate and ethylene.

## **Properties**

- VINNAPAS® 540 ED (ULS) is produced without the use of organic solvents, plasticizers and formaldehyde donors.
- The residual monomer content of the dispersion is below 1000ppm.
- The dispersion is characterized by a high bonding strength due to its high Mw PVOH content.

#### Technical data

#### **Specification**

Property	Condition	Value	Method
Solids content	-	59.5 - 61.5 %	specific method
Viscosity, dynamic	25 °C	2000 - 3000 mPa·s	specific method
рН	-	4.0 - 6.0	specific method

#### General Characteristics

Property	Condition	Value	Method
Residual monomer (vinyl acetate)	-	max. 0.1 %	GC
Minimum film forming temperature	-	0 °C	specific method
Frost resistance	-	protect from freezing	-
Predominant particle size	-	approx. 1000 nm	specific method
Protective colloid / emulsifier system	-	polyvinyl alcohol	-
Filler compatibility	-	very good	specific method
Glass transition temperature	-	approx. 0 °C	specific method

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

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

## **Application details**

VINNAPAS® 540 ED (ULS) is a medium viscosity product which exhibits a high compatibility towards cement and its influence on cement setting is marginal. Therefore, VINNAPAS® 540 ED (ULS) offers several advantages in a wide range of building chemical, construction and general adhesives applications. The dispersion is characterized by a high bonding strength due to its high Mw PVOH content. It is compatible with other dispersions (such as styrene/acrylic and pure acrylic dispersions) and especially suitable for applications such as waterproofing membranes (WPM), tile adhesives, putties and joint compounds, external thermal insulation composite systems (ETICS/EIFS) as well as for cement admixtures. To achieve optimal weathering resistance, the use of opaque pigments is recommended to ensure adequate pigmentation. For typical application fields of VINNAPAS® 540 ED (ULS) you can refer to the section "application".

#### Additional information

If the product is used in applications other than those mentioned, the choice, processing and use of it is the sole responsibility of the purchaser. All legal and other regulations must be complied with.

Slight color variations of the polymer granulate may occure without impairing the product's functionality.

### Packaging and storage

#### **Packaging**

200 kg returnable steel drum, 1 t non-returnable containers and road tanker.

#### Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 9 months starting from the date of manufacture if stored in the original, unopened containers at temperatures between 5 and 30°C. Any longer periods for the maximum storage period that may be described in the Certificate of Analysis which accompanies each shipment of the product, take preference over this suggestion in which case the time period stated in the Certificate of Analysis shall be solely authoritative. Iron or galvanized-iron equipment and containers are not recommended because the dispersion is slightly acidic. Corrosion may result in discoloration of the dispersion or its blends when further processed. Therefore, the use of containers and equipment made of ceramics, rubberized or enameled materials, appropriately finished stainless steel, or plastic (e.g. rigid PVC, polyethylene or polyester resin) is recommended. As polymer dispersions may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended prior to utilization of the product.

#### Preservation for Transport, Storage and further Processing

The product is adequately preserved during transportation and storage if kept in the original, unopened containers. However, if it is transferred to storage tanks, the dispersion should be protected against microbial attack by adding a suitable preservative package. Measures should also be taken to ensure cleanliness of the tanks and pipes. In unstirred tanks, a layer of preservative-containing water should be sprayed onto the surface of the dispersion to prevent the formation of unwanted skin and possible attack by microorganisms. The thickness of this water layer should be < 5 mm for low viscosity dispersions and up to 10-20 mm for high viscosity products. Proper procedures - periodic tank cleaning and sanitization - must be set up in order to prevent microbial attack. Contact your biocide representative/supplier for further plant hygiene recommendations. Measures should be taken to ensure that only clean air enters the tank when the dispersion is removed. Finished products manufactured from polymer dispersions usually also require preservation. The type and scope of preservation will depend on the raw materials used and the anticipated sources of contamination. The compatibility with other components and the efficacy of the preservative should always be tested in the respective formulation. Preservative manufacturers will be able to advise you about the type and dosage of preservative required.

#### Safety notes

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

## QR Code VINNAPAS® 540 ED (ULS)



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

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