

VINNAPAS® 202 HD



Polymer Dispersions

VINNAPAS® 202 HD is a multi-purpose construction dispersion for liquid and paste, cement-free binder technology, specifically suited for primers, ready-to-use tile adhesives and one-component dispersion-based water-proofing membranes. It is based on a hard copolymer of styrene and acrylate and belongs to the product class VINNAPAS® HD which means that it provides a remarkable hydrophobic effect in addition to the excellent adhesion even under wet conditions.

Properties

VINNAPAS® 202 HD is a fine-particle dispersion of a special styrene/acrylate copolymer. VINNAPAS® 202 HD has excellent pigment-binding capacity and very good adhesion to inorganic substrates. VINNAPAS® 202 HD is ideal for manufacturing pasty construction and tile adhesives with extremely good wet adhesion properties. VINNAPAS® 202 HD is also used as a binder for roofing compounds, high-quality synthetic-resin and silicone-resin plasters, and as a primer for flooring compounds.

Technical data

Specification

Property	Condition	Value	Method
Viscosity, dynamic	23 °C Brookfield, spindle 4 / 20 rpm	1500 - 3500 mPa·s	DIN EN ISO 2555
pH	-	7.5 - 8.3	DIN/ISO 976
Solids content	-	49 - 51 %	DIN EN ISO 3251

General Characteristics

Property	Condition	Value	Method
Minimum film forming temperature	-	approx. 23 °C	DIN ISO 2115
Predominant particle size	-	approx. 100 nm	specific method
Protective colloid / emulsifier system	-	surfactants	-
Appearance of the dispersion film	-	glossy	Visual
Glass transition temperature	-	18 °C	specific method
Compatibility with cement	-	incompatible	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.

Applications

- Primer
- Ready-to-Use Tile Adhesives

Application details

Modification

Fillers and Pigments:

VINNAPAS® 202 HD has excellent shear stability at pH values above 7.5 and is therefore easy to process. The dispersion is readily compatible with conventional fillers and pigments. The only exceptions are platelet pigments, such as kaolin, which raise the viscosity of the batch. The correct type and amount of wetting agent can be easily determined by storage stability tests of the pigmented batch at elevated temperatures in a drying cabinet at 50 °C.

Film-forming aids:

VINNAPAS® 202 HD is produced without the use of organic solvents and plasticizers. Because of its MFT of about 23°C, film-forming aids should be added to VINNAPAS® 202 HD. We particularly recommend ¹⁾ARCOSOLV® DPnB. Other possibilities are ²⁾Loxanol® CA5308, ¹⁾ARCOSOLV® TPnB and ³⁾Texanol™, where an amount of 4 to 5% is recommended, based on the amount of dispersion. Solvents such as white spirit, butyl glycol and aromatic hydrocarbons are less effective. For a softer film formulation, add plasticizers.

Defoaming Agents:

Adequate defoaming is very important to the quality of the synthetic-resin-bound plasters. Suitable defoaming agents are ⁴⁾SILFOAM® SD 882 and SRE and ⁵⁾AGITAN® 281, 295, 218 and 217.

Thickening Agents:

VINNAPAS® 202 HD has a medium viscosity and high pseudoplasticity. It responds well to small amounts of thickening agents. Suitable thickening agents include cellulose ether, ⁶⁾BENTONE® LT and Hectorit. Similarly, acrylic acid copolymers, such as ⁷⁾ROHAGIT® SD 15 and ⁸⁾Rheovis® AS 1125 can be used. Addition of small amounts of glycols or glycol ethers (e. g. propylene glycol or propylene glycol monomethyl ether) can improve the leveling of coating substances based on VINNAPAS® 202 HD

Films produced from this dispersion have excellent resistance to water and alkalis, with only slight water absorption and greatly delayed whitening. Plasters based on this dispersion therefore show very little tendency to soften under prolonged immersion in water. VINNAPAS® 202 HD is particularly recommended for producing ready-to-use construction adhesives, which have outstanding adhesion bond strength even when exposed to water. This improved wet adhesion is particularly useful for ceramic tiles adhesives (class D2 according to EN 12004).

For typical application fields of VINNAPAS® 202 HD refer to the section "application". Please discuss additional applications with your WACKER customer representative.

- 1) ARCOSOLV® is a trademark of LyondellBasell group companies
- 2) Loxanol® is a trademark of BASF SE
- 3) Texanol™ is a trademark of Eastman Chemical Company
- 4) SILFOAM® is a trademark of Wacker Chemie AG
- 5) AGITAN® is a trademark of MÜNZING Chemie GmbH
- 6) BENTONE® is a trademark of Elementis Specialties, Inc
- 7) ROHAGIT® is a trademark of Synthomer
- 8) Rheovis® is a trademark of BASF SE

Packaging and storage

Packaging

Non-returnable PE drums of 150 kg capacity (standard dispatch quantity: only fully-loaded pallets à 750 kg), non-returnable containers of 1 t capacity and road tankers.

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 6 months starting from the date of receipt 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 containers and equipment are not recommended. Corrosion could result in discoloration of the dispersion or blends made from it in further processing. We therefore recommend the use of containers and equipment made of ceramic, rubberized or enameled materials, appropriately finished stainless steel, or plastic (rigid PVC, polyethylene or polyester resin). As polymer dispersions may tend to superficial film formation, skins or lumps may be formed during storage or transportation. A filtration process is thus 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 appropriate Material Safety Data Sheets. These are available on request from WACKER sales offices.

QR Code VINNAPAS® 202 HD



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

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