

# VINNAPAS® SAF 34



# **Polymer Dispersions**

VINNAPAS® SAF 34 is a fine-particle dispersion of a special styrene/acrylate copolymer. VINNAPAS® SAF 34 is produced without the use of alkyl phenol ethoxylate (APEO) containing compounds.

# **Properties**

- Excellent pigment binding properties
- Great adhesion to inorganic substrates
- Very good water resistance
- Excellent alkali resistance
- Very low dirt pick-up
- Great versatility

#### Technical data

#### **Specification**

Property	Condition	Value	Method
Solids content	-	49 - 51 %	DIN EN ISO 3251
Viscosity, dynamic	23 °C   Brookfield, spindle 5 / 20 rpm	6000 - 12000 mPa⋅s	DIN EN ISO 2555
рН	-	7.5 - 8.5	DIN/ISO 976

## **General Characteristics**

Property	Condition	Value	Method
Electrolyte stability	-	very good	specific method
Density	-	1.03 g/cm <sup>3</sup>	DIN EN ISO 2811-1
Minimum film forming temperature	-	approx. 12 °C	DIN ISO 2115
Frost resistance	-	protect from freezing	specific method
Predominant particle size	-	approx. 100 nm	specific method
Protective colloid / emulsifier system	-	ionic and nonionic surfactants	-
Filler compatibility	-	very good	specific method
Surface of the dispersion film	-	tack free	specific method
Glass transition temperature	-	approx. 20 °C	specific method
Appearance	-	clear, glossy	Visual
Cold break temperature	-	approx. 10 °C	DIN EN 1876-2

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**

- Polymer Dispersions for Primers
- Roof Coatings

## **Application details**

VINNAPAS® SAF 34 has an excellent pigment-binding capacity and very good adhesion to inorganic substrates.

VINNAPAS® SAF 34 has proved for many years to be an outstanding binder in many fields of application and versatility is its special strength.

VINNAPAS® SAF 34 is a high performance binder for interior and exterior paints, dispersion modified silicate paints and plasters, silicone paints and plasters, synthetic resin bound plasters and roof coatings. Additionally, VINNAPAS® SAF 34 is an ideal binder for manufacturing construction and tile adhesive paste with extremely good wet adhesion properties. Films produced from this dispersion have an excellent resistance to water and alkalis, with only slight water absorption and greatly delayed whitening. Paints and plasters based on this dispersion therefore show very little tendency to soften under prolonged immersion in water.

VINNAPAS® SAF 34 is an outstanding binder for exterior masonry paints which show very low dirt pick-up. Conventional masonry paints are frequently formulated below the critical pigment volume concentration (CPVC) but silicone resin paints must be permeable to water vapor and therefore should be formulated above the CPVC. WACKER silicone masonry water repellants like SILRES® BS 45 and SILRES BS® 1306 show good compatibility with VINNAPAS® SAF 34 and silicone resin paints containing VINNAPAS® SAF 34 exhibit excellent water repellency and low capillary water absorption.

If VINNAPAS® SAF 34 is to be used in dispersion silicate paints, the compatibility with the corresponding water glass should always be checked.

VINNAPAS® SAF 34 is particularly recommended for producing pasty construction adhesives, which must have outstanding strength even when exposed to water. This improved wet adhesion is particularly useful for ceramic tiles adhesives.

#### **Processing**

VINNAPAS® SAF 34 has an 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 can raise the viscosity of the batch. The correct type and amount of wetting agent can be easily determined by briefly warming the pigmented batch in a drying cabinet at 50 °C.

Film-forming aids: VINNAPAS® SAF 34 already contains small amounts of 1)TexanoITM and forms a film at temperatures above 12°C. If a lower filmforming temperature is desired, additional film-forming agents must be used.

#### **Additional information**

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

For questions concerning food contact status according the chapter 21 CFR (US FDA) and German BfR, please feel free to contact us.

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## Packaging and storage

#### 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 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.

#### **OR Code VINNAPAS® SAF 34**



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

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