

VINNOL® CE 35 (EX)



Polymer Dispersions

VINNOL® CE 35 (EX) is an aqueous dispersion of a terpolymer of vinyl chloride, vinyl acetate and ethylene.

Properties

- VINNOL® CE 35 (EX) is a stiff film-former and imparts excellent heat-sealability and high frequency (HF)-weldability to nonwovens & textiles substrates.
- Because of its high chlorine content, VINNOL® CE 35 (EX) can be used in conjunction with antimony oxide, phosphorous-nitrogen compounds or other flame-retardant additives to produce flame retardant coatings.
- It also especially suitable for making plasticizer-free heat sealable and high frequency weldable coatings on paper and cardboard.

Technical data

Specification

Property	Condition	Value	Method
Solids content	-	49 - 51 %	DIN EN ISO 3251
Viscosity, dynamic	23 °C	40 - 100 mPa·s	DIN EN ISO 2555
pH	-	5 - 7.5	DIN/ISO 976

General Characteristics

Property	Condition	Value	Method
Minimum film forming temperature	-	approx. 45 °C	DIN ISO 2115
Frost resistance	-	protect from freezing	specific method
Predominant particle size	-	approx. 0.15 µm	specific method
Protective colloid / emulsifier system	-	ionic and nonionic surfactants	-
Filler compatibility	-	very good	specific method
Appearance of the dispersion film	-	clear, glossy	Visual
Elongation at break	-	brittle	DIN EN ISO 527, part 1 - 3
Glass transition temperature DSC	-	approx. 36 °C	specific method
Coalescing agent / plasticizer	-	none	-
Predominant particle size	-	approx. 0.15 µm	specific method
Tensile strength	-	brittle	DIN EN ISO 527, part 1 - 3

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

- Automotive Insulation
- Filtration

Application details

General

VINNOL® CE 35 (EX) is especially suitable as binder for heats-sealable/ HF-weldable waddings. It sprays well and does not generate unpleasant odors during processing.

Polymer Dispersions

VINNOL® CE 35 (EX) is miscible with most anionic and/ or nonionic polymer dispersions especially with VINNOL® GEN 2752. The latter will soften hand feel.

Solvents and Plasticizers

The flame-retardant effect of VINNOL® CE 35 (EX) can be increased by adding, for example phosphorous-nitrogen compound, which also softens the polymer film and lowers the glass transition and minimum film forming temperatures. The addition should be made at room temperature, but the mixture should then be heated at about 50 °C for 1 hour to ensure that the plasticizer diffuses completely into the resin particles.

Defoaming Agents

If necessary, VINNOL® CE 35 (EX) dispersion can be defoamed with ¹⁾SILFOAM® SE1662, for example. The efficacy and compatibility of the formulation chosen should always be checked.

Thickening Agents

Polyurethane thickeners such as ²⁾ROHAGIT® SD15, ³⁾ACRYSOL™ RM8, ⁴⁾Rheovis® AS 1125 are recommended to use with VINNOL® CE 35 (EX). The efficacy and compatibility of the formulation chosen should always be checked.

- 1) SILFOAM® is a trademark of Wacker Chemie AG
- 2) ROHAGIT® is a trademark of Synthomer PLC
- 3) ACRYSOL™ is a trademark of Dow Chemical Company
- 4) RHEOVIS® is a trademark of BASF SE

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. If stored in the original, unopened containers at cool (below 30 °C), but frost-free temperatures the product has a shelf life of 9 months from the date of manufacture. 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. To maintain proper storage conditions appropriate measures should also be taken to ensure cleanliness of the tanks and pipes. In a storage tank in which the product is not stirred, it is advisable to contact your biocide representative/supplier. Proper procedures must be set up in order to prevent microbial attack between necessary periodic tank cleaning and sanitization. These procedures will vary, since loading and unloading practices in each storage situation will differ slightly. 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 VINNOL® CE 35 (EX)



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

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