

VINNAPAS® C 305



Polyvinyl Acetate & Copolymers

VINNAPAS® C 305 is a solid, colorless to pale yellowish copolymer of vinyl acetate and crotonic acid.

Properties

• VINNAPAS® C 305 is a physically drying, thermoplastic binder which forms films through solvent evaporation. When appropriate solvents are used, the dry films are odorless.

Technical data

Specification

Property	Condition	Value	Method
Acid number	-	30.0 - 38.0 mg KOH/g	specific method
Viscosity in 10 % ethyl acetate	20.0 °C	2.5 - 3.5 mPa·s	ASTM D 445 - 06

General Characteristics

Property	Condition	Value	Method
Content Volatiles	-	< 0.5 %	specific method
Density of the polymer	-	approx. 1.18 g/cm ³	DIN EN ISO 1183 /1-3
Glass transition temperature	-	approx. 47 °C	DSC DIN EN ISO 11357-2
K-value	-	29 - 33	DIN 53726
Molecular weight (Mw)	-	approx. 50000 g/mol	SEC, PS-Standard
Softening point	-	approx. 120 °C	ASTM D 3104
Supply form	-	solid, colorless to pale yellowish flakes	-

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.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be downloaded via WACKER web site http://www.wacker.com.

Applications

• Industrial Coatings

Application details

Typical applications for VINNAPAS® C 305:

- moisture-sensitive adhesives
- finishes for the textile and hat industries
- inks for fabrics, leather. Marks made with such inks can easily be removed with slightly alkaline water.
- lacquers removable by aqueous alkali, often in combination with hard resins.

Processing - Product data

Melt viscosity, 100% Polymer

Bohlin high temperature viscosimeter

100 °C ~ 7000 Pa·s

120 °C ~ 2000 Pa·s

140 °C ~ 300 Pa·s

160 °C ~ 80 Pa·s

Solvents

VINNAPAS® C 305 is soluble in esters, ketones and methanol. Solutions in 94% ethyl alcohol are turbid, but the films deposited from them are almost clear when dry. The resin is only partly soluble in toluene. Solutions with solids contents of up to 50% can be made with good solvents such as acetone and ethyl acetate.

VINNAPAS® C 305 will dissolve in alkaline water, although this is a time-consuming operation resulting in high viscosity solutions. Solution may be speeded up by also using a water soluble solvent and using the following formulation as a guide: 40 parts VINNAPAS® C 305,

35 parts water,

10 parts conc. Ammonia,

30 parts methanol

Acetone may be used instead of methanol. The solution can be diluted by stirring in more water. An alternative method consists of dissolving the resin only in acetone and then diluting the resultant solution with water containing ammonia. Care should be taken not to exceed a pH value of 8 since otherwise, the resin will be partly saponified and the solution will gel. Dilute caustic potash and certain organic amines can also be used instead of ammonia. Sodium and calcium hydroxide are unsuitable for this purpose since insoluble salts are formed with sodium and calcium ions.

Plasticizers

VINNAPAS® C 305 may be plasticized with the plasticizers normally used for polyvinyl acetate, e. g. dibutyl phthalate and tricresyl phosphate.

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

Packaging

VINNAPAS® C 305 is supplied in 25 kg Paper Bags. Big Bag is available on request.

Storage

To prevent caking VINNAPAS® C 305 should not be stored at temperatures above 20°C. Storage conditions must be dry; material must be protected from direct sun exposure.

Under these conditions the product has a shelf life of at least 12 months starting from the date of receipt.

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® C 305



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

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