

# ®Vinnolit P 70 HT

PVC paste application

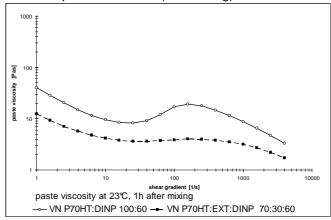
# **Brief Description**

<sup>®</sup>Vinnolit P 70 HT is a fine grained homopolymer, designed for paste-applications. It can be easily converted into a plastisol with low viscosity, moderate pseudoplastic flow characteristic and excellent shelf-life.

The plastisols made of Vinnolit P 70 HT, with a medium plasticizer content exhibit a moderate pseudoplastic rheology (see diagram), with slight dilatancy at high shear rates. The dilatancy can be reduced/eliminated by blending with extender resins, such as Vinnolit EXT (see diagram) or with specially emulsion grades.

Vinnolit P 70 HT shows excellent low water absorption characteristics and has outstanding weathering properties combined with a very high thermostability. With this dominant properties it is perfectly useful for outdoor

applications, like signs, tarpaulins, awnings, billboards, roofing sheets, textile constructions and coil coatings. The product additionally shows an excellent transparency and very low plate out properties, which makes it profoundly suitable for clear-transparent top coats as well as for printed surfaces (advertising).



Raw Material Properties	Typical Value*	Unit	Test Method	
			DIN EN ISO	ISO
K-value	70	-	1628-2	1628-2
Reduced viscosity	124	ml/g	1628-2	1628-2
Apparent bulk density	0.370	g/ml	60	60
Particle size distribution: sieve retention retained on 0.063 mm screen	≤ 1.0	%	53195	1
Volatile matter	≤ 0.3	%	-	-
Emulsifier content	extremely low	-	-	-

<sup>\*</sup> The values given above are **typical** test results which should be used as a guide only. They do not form the whole or part of a specification or guarantee.

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### **Processing and Application**

Plastisols based on Vinnolit P 70 HT can be easily processed by all common technologies. The plastisols are also processable in dipping, casting or spraying techniques.

For processing pastes which have a ratio of less than 100 parts PVC: 60 parts plasticizer or faster running machines, the dilatancy can be reduced by blending with extender resins such as Vinnolit EXT. Blending with low-viscosity emulsion PVC grades such as Vinnolit E 68 CF or Vinnolit E 70 TT may also be perfect for this purpose and giving additional properties.

Unpigmented coatings of Vinnolit P 70 HT containing the appropriate stabilizer are crystal clear and have a very glossy surface. Apart from being used for the applications mentioned in the brief description above, Vinnolit P 70 HT can be used for thin-walled, transparent dip coatings, sealants (crown corks, twist-off closures) and, because of its extreme particle fineness, also for organosols, strippable lacquers and primers.

Due to it's very low emulsifier content, the product is, however, less suitable for applications involving fusion by contact with heated metal surfaces (contact fusion, rotational moulding). In such cases the addition of a suitable mould release agent could be advantageous.

#### The **Core Properties** of Vinnolit P 70 HT are:

- very fine particles
- high transparency and crystal clear films
- glossy homogeneous surface
- very low plate out
- neutral colour and very good thermostability
- excellent weathering properties
- lowest water absorption tendency
- good adhesion properties on textiles and metal surfaces
- good miscibility with extender- or blending-PVC grades
- very good printability of the surface
- very good potlife and storage stability

## Packaging, Delivery and Storage

The product is supplied in 25 kg bags as well as in bulk form.

Vinnolit P 70 HT should be stored dry and away from direct or indirect sources of heat. Please consult the safety data sheet for information about the safety precautions necessary for transport, storage, blending and processing.

#### **General Information**

Further processing information and recommendations can be obtained from our Technical Service department or our local representatives.

The data and recommendations contained in this product information represent the current state of our knowledge and serve as a guide only to our products and their potential applications. Therefore, no warranty of specific properties of the products mentioned here in nor of their suitability or fitness for a particular purpose is implied.

The information given in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also used. Patent or other proprietary rights of third parties must be observed. The quality of our products is warranted under the terms of our General Conditions of Sale.

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Vinnolit GmbH & Co. KG

Carl-Zeiss-Ring 25 85737 Ismaning Germany

Tel.: +49 89 9 61 03-0 Fax: +49 89 9 61 03-103 www.vinnolit.com

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