



PB 1704

Type:

PB 1704 is a high K-value PVC homopolymer resin obtained by microsuspension polymerisation and used for the preparation of plastisols.

Main uses:

- * Coating: floor and wall coverings, coated fabrics, coil-coating,
- * Dipping,
- * Crown seals.

LACOVYL® PB 1704 is a **high K-value** (enhanced mechanical properties) resin, **highly fluid**, with **good thermal stability** and a **high mattness level**.

General characteristics:

	ISO reference	Value	Units
Viscosity index	(ISO 1628-2)	180	ml/g
K-value	(ISO 1628-2)	82	
Humidity	(ISO 1269)	< 0.25	%
Rheological behaviour	Pseudoplastic		
Plasticiser range	35 phr ←————→ 70 phr		

Properties:

Résin

PB 1704 is a very fine resin allowing coating thin films with good quality.

Plastisols

The low viscosity of PB 1704 resin allows the production of heavily filled plastisols or very low plasticised pastes.

In addition, the pseudoplastic behaviour of plastisols prepared with PB 1704 makes this resin suitable for applications requiring process at high shear levels: small thickness coatings at high speed.

Pseudoplasticity allows the storage of heavily filled formulations without major risk of settlement.

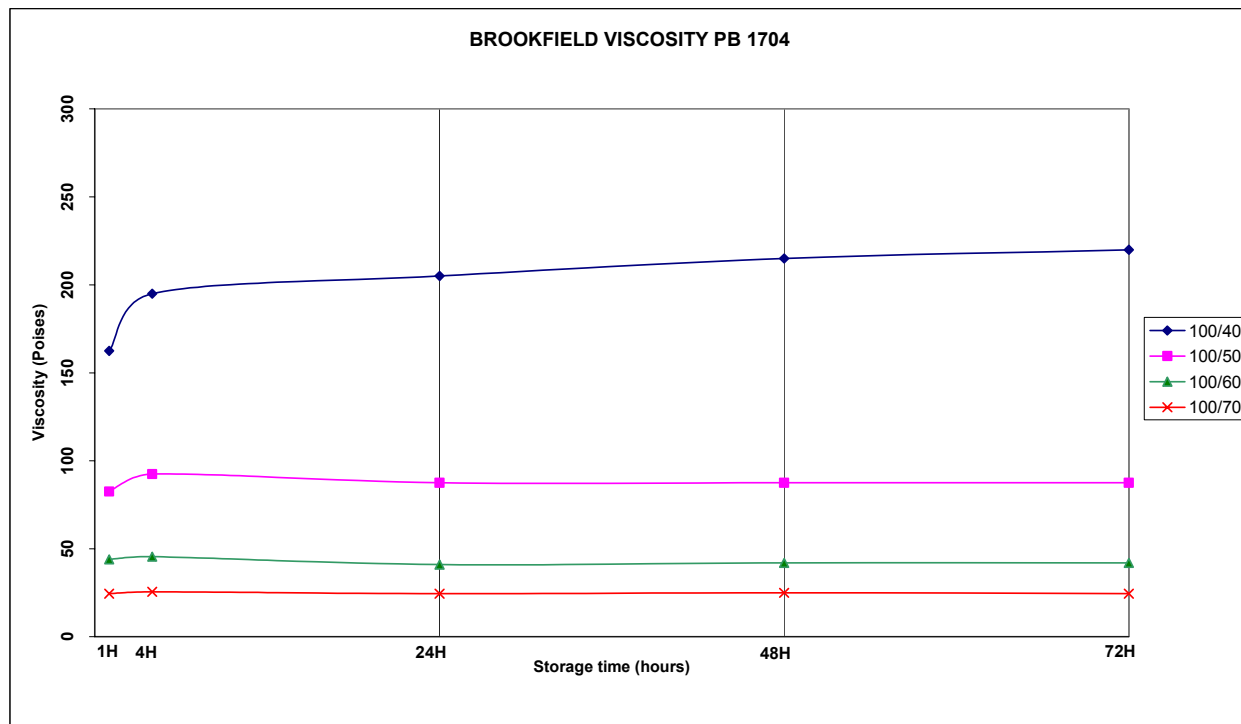
Compact coatings

PB 1704 resin has good thermal stability, whatever the nature of stabiliser used (Sn, Ba/Zn ou Ca/Zn), and has good thermal stability (short and long term) notably allowing gelation of thick articles requiring high temperatures and long times in the oven.

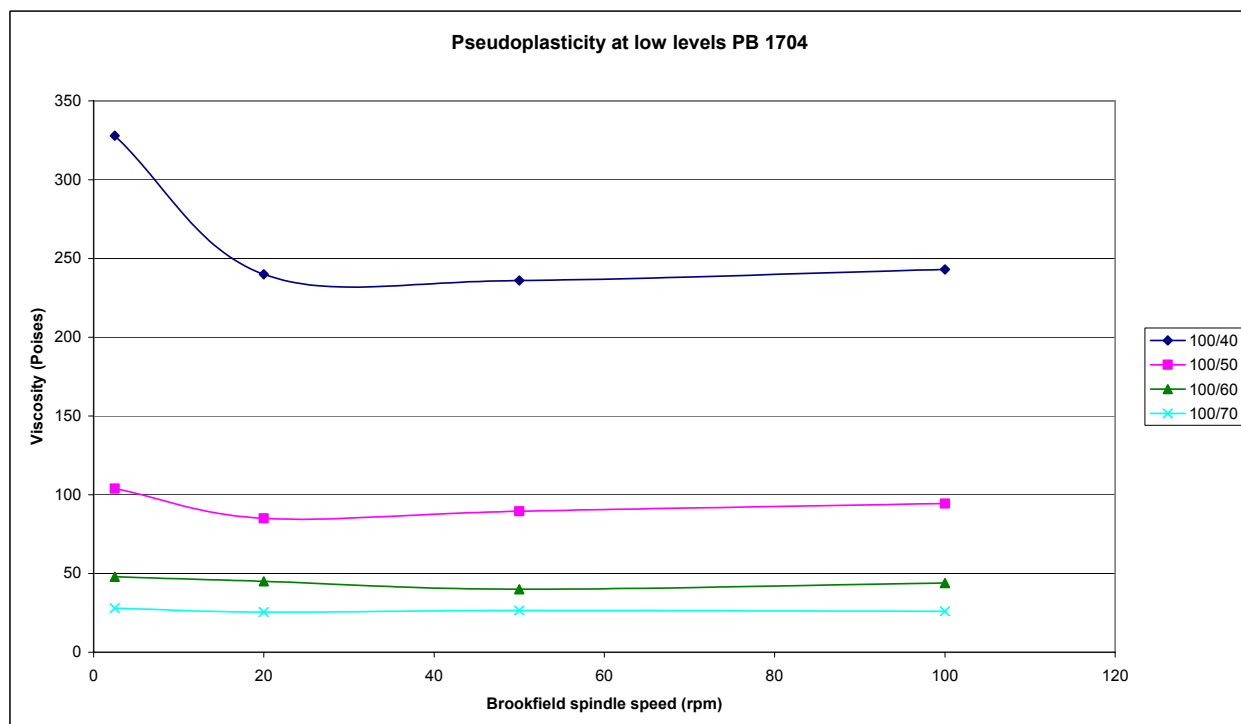
The high K-value of PB 1704 also allows the production of articles having very good mechanical properties with increased mattness, making it a resin particularly well suited for surface layers of floor coverings or for coated fabrics.

Rheological properties:

Readings at low shear levels: BROOKFIELD viscometer at 20 rpm.

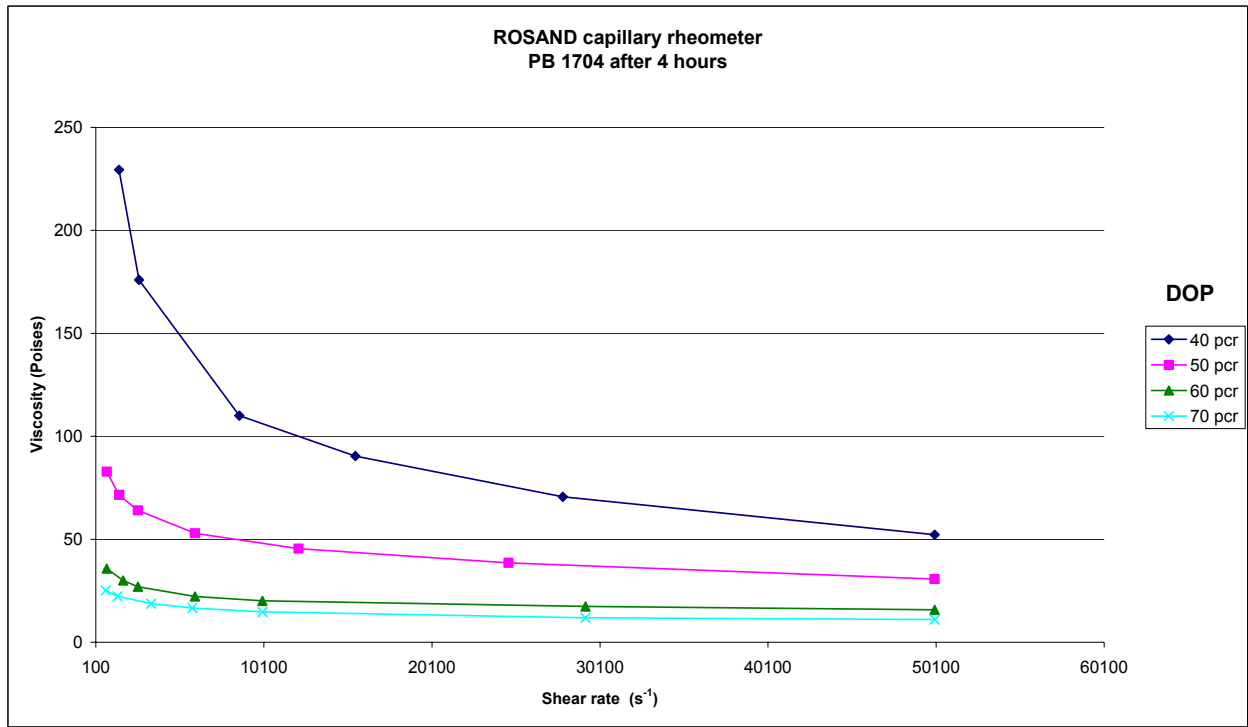


Viscosity after 24 hours rest-time
depending on the Brookfield spindle rotation speed



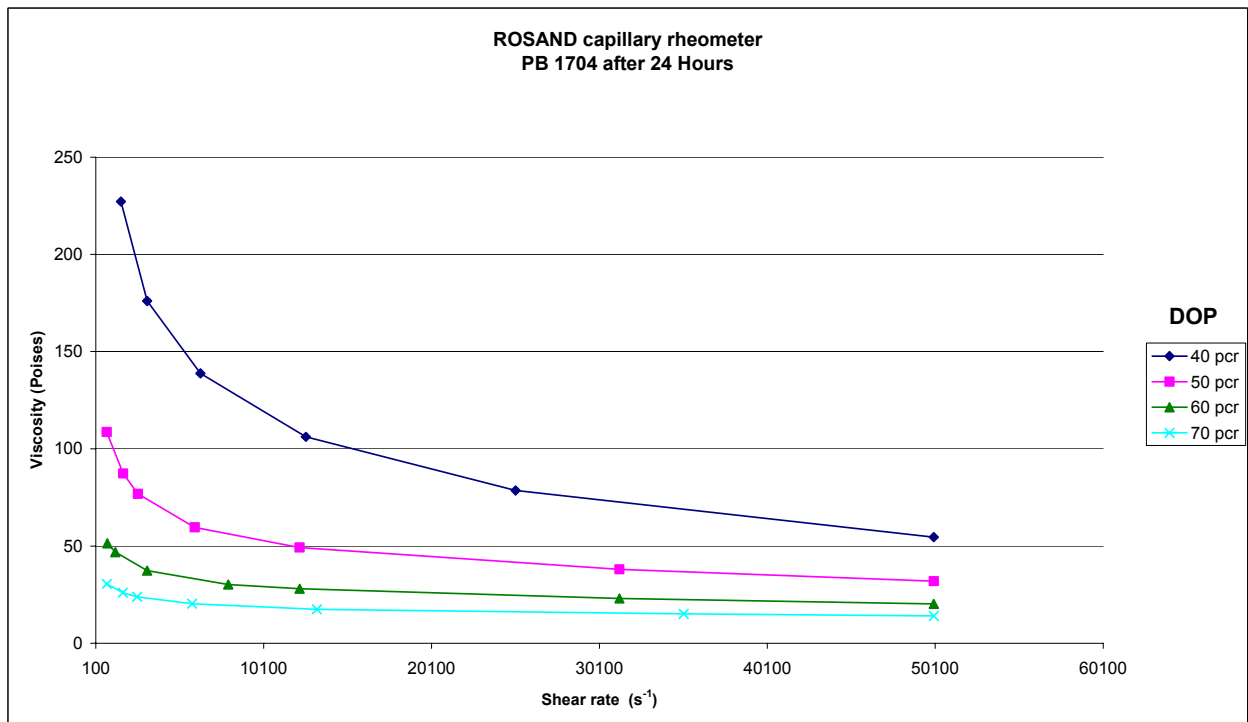
Ageing/Rest-time: the plastisols were stored at 23°C and 50% relative humidity. The four curves correspond to four different plasticisation levels.

High shear level readings: ROSAND capillary viscometer.



The PB 1704 resin showed pseudoplastic behaviour.

The same readings of capillary viscosity after 24 hours rest-time at 23°C and 50% relative humidity gave the following results:



As the preceding graph shows, the very pseudoplastic nature of the PB 1704 resin remained pronounced after 24 hours rest-time of the plastisol.

Packaging and storage:

PB 1704 resin is packed in bags of 25 kg, packed and wrapped on pallets.

It can also be delivered in bulk.

The resin must be stored in a dry place away from all heat sources, direct or indirect.

The recommended storage time for this resin is 18 months maximum.

For information on the precautions for the use of PB 1704 resin, please refer to the safety information sheet for this product.

General Information:

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

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BU PVC	08.01	04/2008

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