PB 1702

Type:

PB 1702 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 1702 is a high K-value (enhanced mechanical properties) resin, highly fluid, with good thermal stability and semi matt level.

General characteristics:

PB 1702 is a very low viscosity resin specially recommended for lightly (or very lightly) plasticised applications or highly filled formulations.

	ISO reference	Value	Units
Viscosity Index	(ISO 1628-2)	167	ml/g
K-value	(ISO 1628-2)	79.5	
Humidity	(ISO 1269)	< 0.25	%
Rheological behaviour	Pseudoplastic		
Plasticiser range	30 phr ⟷ 70 phr		

Properties:

Resin

The high degree of fineness of PB 1702 resin allows coatings in extremely thin films without producing defects.

Plastisols

The low viscosity of PB 1702 resin allows the production of plastisols that are highly filled or very lightly plasticised.
The pseudoplastic behaviour of plastisols prepared with PB 1702 allows its use for applications demanding high shear processing: thin coatings at high speed.
This pseudoplasticity also allows storage of highly filled formulations without major risk of settlement.

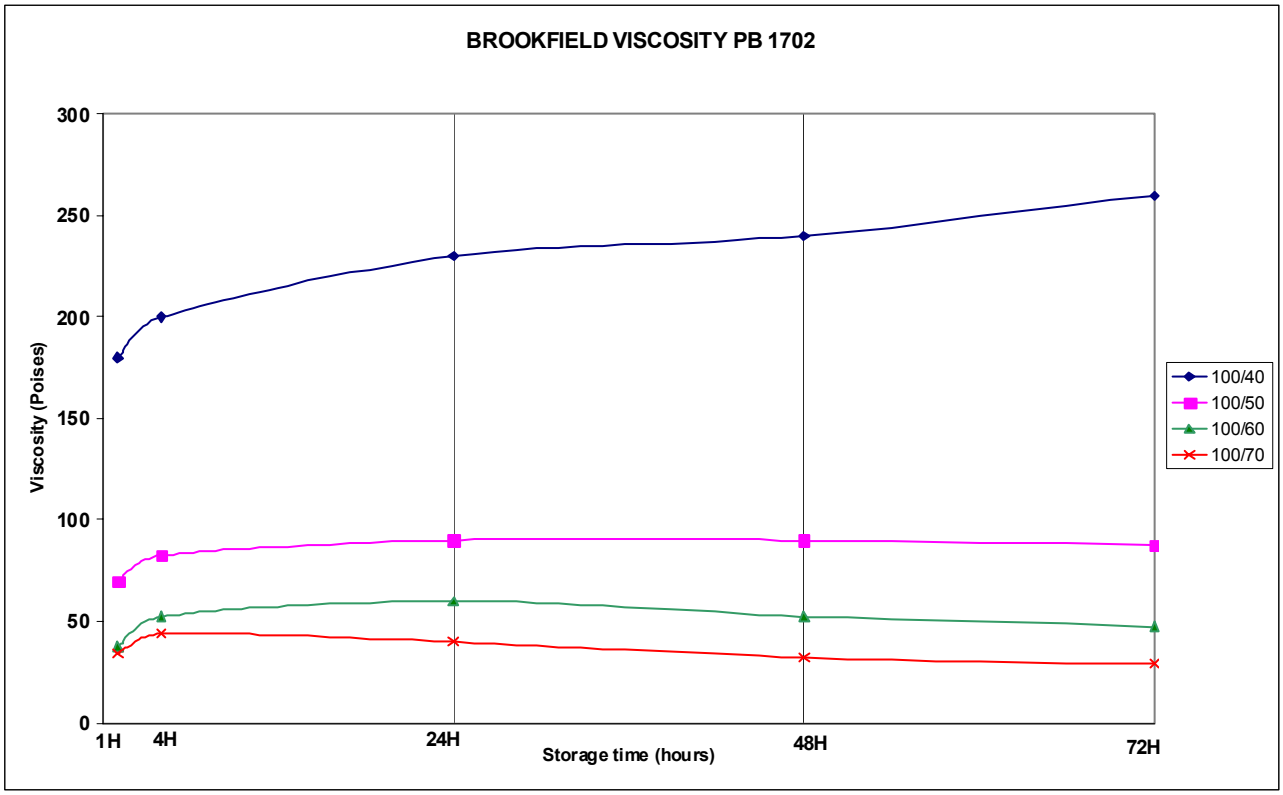
Compact coatings

PB 1702 resin has high 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 the resin allows medium mattness to be obtained thus making it a resin particularly well suited for surface layers of floor coverings or fabric coatings.
The high K-value of PB 1702 also allows the production of articles having very good mechanical properties.

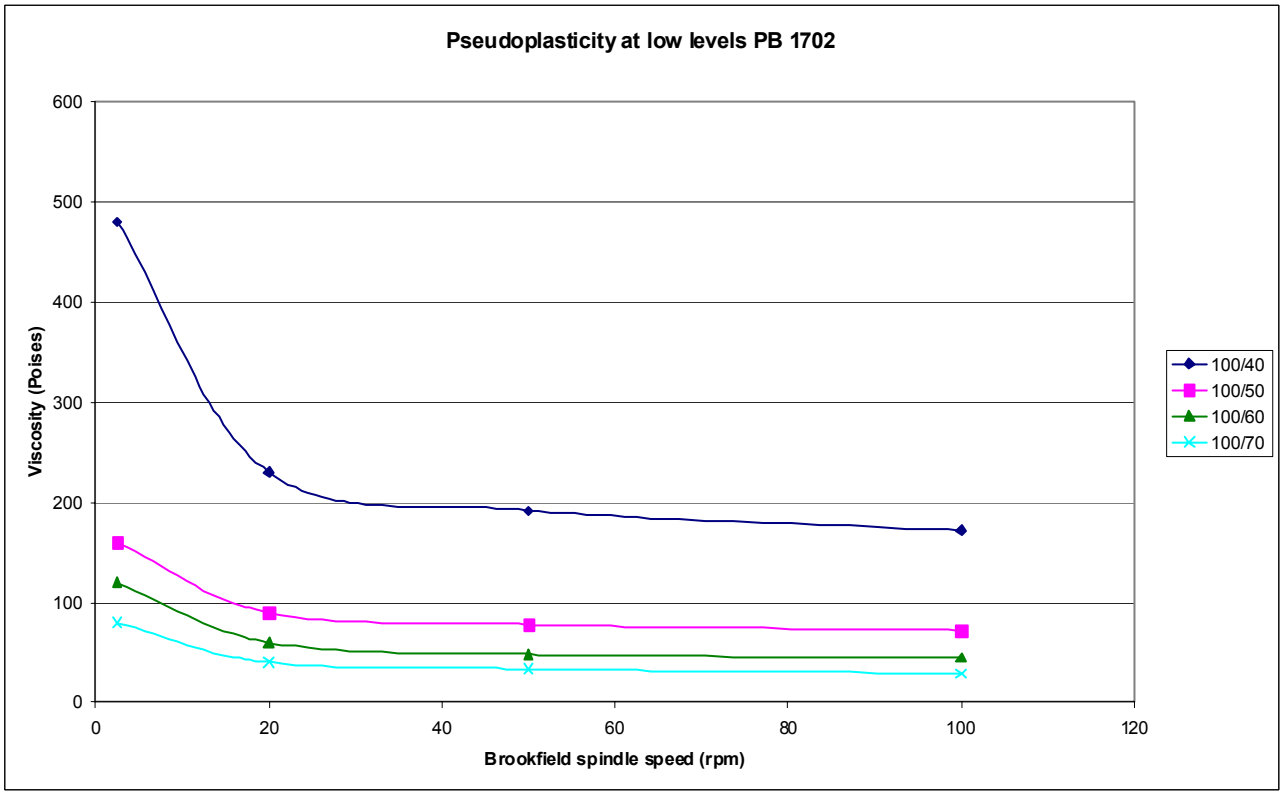
PB 1702 resin is suitable for gelation using a heated drum without producing any sticking.

Rheological properties:

Readings at low shear levels: BROOKFIELD viscosimeter at 20 rpm

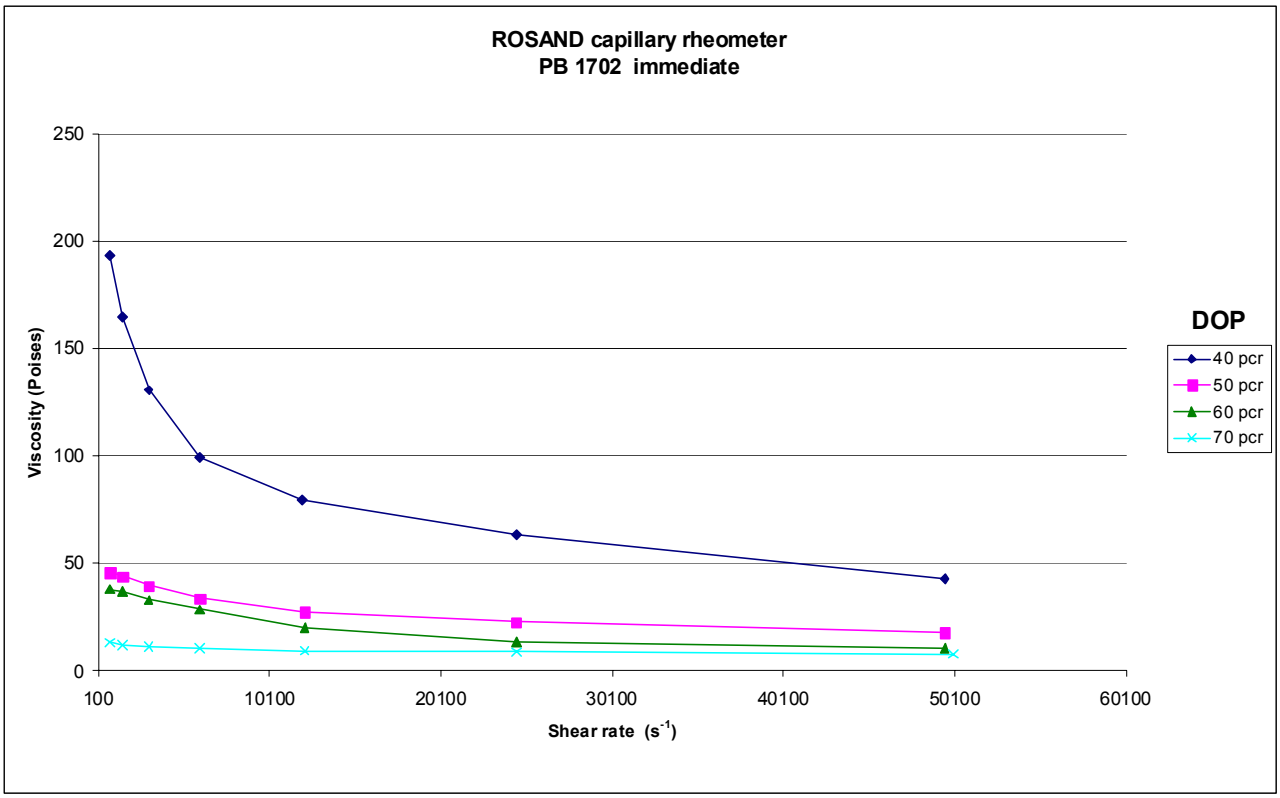


Viscosity after 24 hours rest-time
according to Brookfield spindle rotation speed



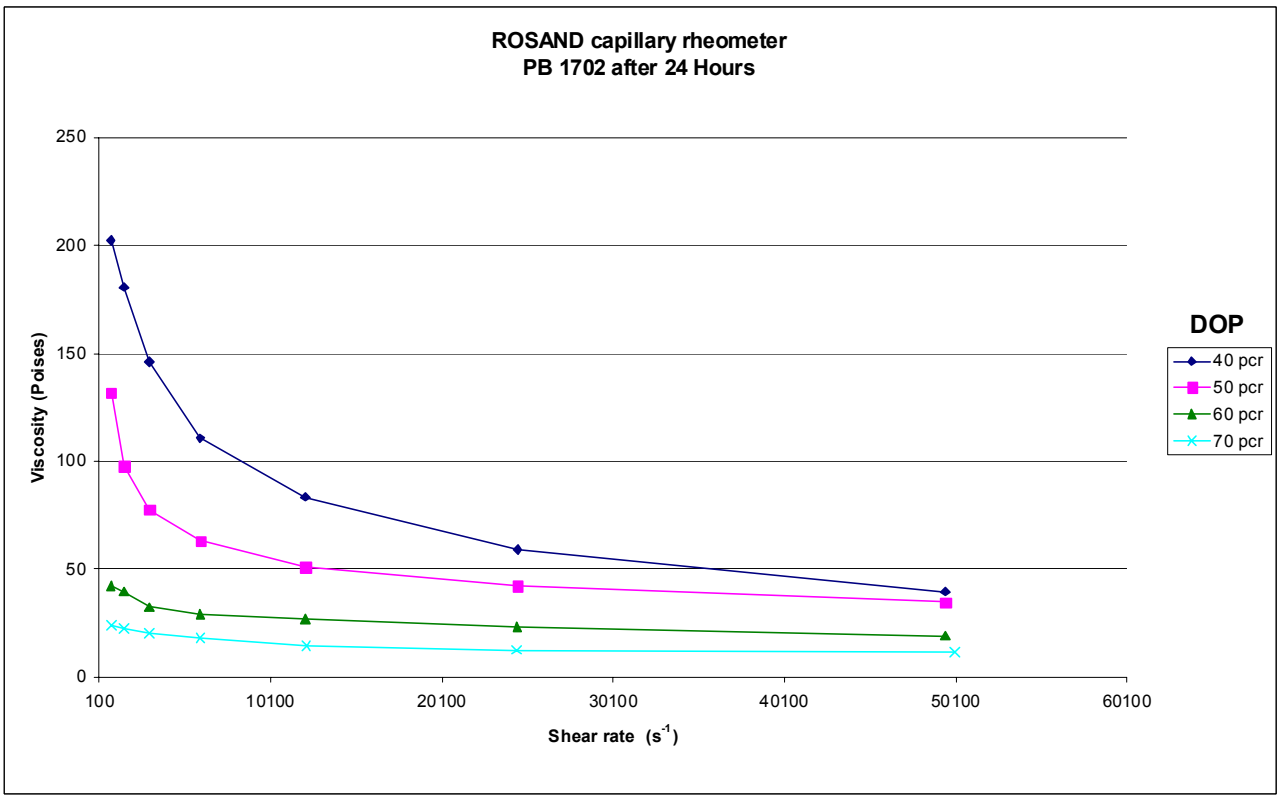
Ageing/Rest-time: the plastisols were stored at 23°C et 50% relative humidity. The four curves correspond to four different plasticisation levels.

High shear level readings: ROSAND capillary viscosimeter



The PB 1702 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 pseudoplastic nature of PB 1702 resin remained pronounced after 24 hours rest-time of the plastisol.

Packaging and storage:

PB 1702 resin is packed in bags of 25 kg, stacked 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 1702 resin, please refer to the Safety Data 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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