

SABIC® PVC 701E

Emulsion polyvinyl chloride for Paste preparation

Description.

SABIC® PVC 701E is a fine particle, medium molecular weight homopolymer, made by emulsion polymerization. It is designed for the manufacture of plastisols exhibiting low viscosities at low shear rates and slightly Pseudoplastic flow characteristic at high shear rates with plastizer concentration of more than 50 Phr. Plastisol made from this resin exhibit the following properties:

- Long shelf life, low viscosity aging
- No tendency towards settling out
- Easy gelation
- Good thermal stability with a range of standard stabilizers
- The potential to use high filler loadings

Applications.

Pastes made from SABIC® PVC 701E are ideal for compact, clear thin coating and also for chemically blown spread coatings with a low plasticizer content. SABIC® PVC 701E pastes are particularly suitable for:

- Spread coating of compact layers of low-to-medium plasticizer levels having good mechanical properties (conveyor belts, tarpaulins) and good transparency (raincoats, swimming pool liners, tablecloths).
- Spread coating of compact, thin layers made at high speed (wall covering, top coats).
- Spread coating of chemically blown layers with low plasticizer content (handbags, luggage) or with medium-plasticizer and high-filler content (vinyl-backed carpets, cushioned vinyl floor coverings).
- Screen coating of textured foamed wall covering.

SABIC® PVC 701E is also suitable for other processes, e.g., rotational molding, slush molding and dipping.

Plastisol Preparation.

SABIC® PVC 701E is very easily converted into a paste using intensive or slow speed mixers. If an intensive mixer is used, overheating during mixing must be avoided since this could lead to unwanted increase in viscosity. After mixing, the plastisol may be sieved, passed through a mill and deaerated. Sieving is always useful to avoid contamination and the presence of coarse particles. It is particularly recommended that a mill be used when pastes are intended for top coatings, or if a slow speed mixer is used. Deaeration is always necessary to avoid blisters when pastes are intended for top layers, but is unnecessary when plastisols are used for the manufacture of chemically blown foam.

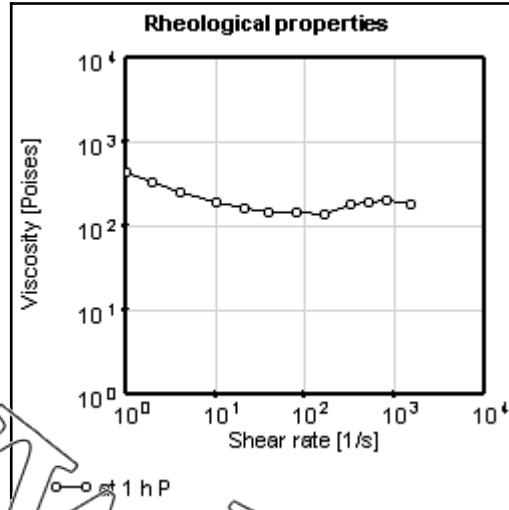
Typical data.

| Properties | Units SI | Values | Test methods |
|-----------------------------|-------------------|-------------|---------------|
| Polymer properties | | | |
| Bulk Density | kg/m ³ | 320 | ISO 68 |
| K-value | - | 70 | ISO 1628-2 |
| Volatile content | % max | 0.3 | ISO 1269 |
| Methanol extract | % | 1.7 | ISO 599 |
| PH (Aqueous extract) | - | 8.5 | ISO 1264 |
| Particle size | | | ISO 1624 |
| retained on 106 µm | % | 0.01 | |
| retained on 63 µm | % | 0.75 | |
| Paste viscosity | | | |
| Brookfield, 20 rpm | Poise | 300 | ISO 2555/4575 |
| Severs, 500 s-1 | Poise | 450 | ASTM D 1823 |

1) Paste made from 100 parts PVC and 40 parts DOP, measured after one hour aging

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Packaging And Storage.

Emulsion Polyvinyl Chloride is delivered in paper bags filled using a filling valve. Emulsion Polyvinyl Chloride should be stored dry and away from sources of heat. Pastes should also be stored dry and at moderate temperature (under 38 °C and as near to 24 °C as possible), to avoid unfavorable effects on processability.

Disclaimer. The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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