

PVC 701E

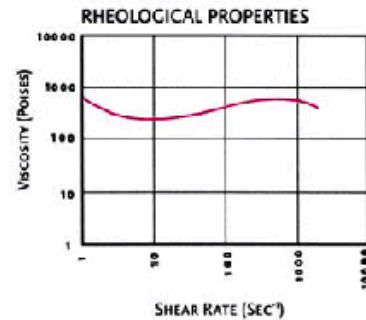
Emulsion - Polyvinyl Chloride

General Properties

PVC 701E is a fine particle, medium - molecular weight PVC homopolymer, made by emulsion polymerization. It is designed for the manufacture of plastisols exhibiting high viscosities at low shear rates and slightly Pseudoplastic flow characteristic at high shear rates with plastizer concentration of (40 – 60) 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.



Property	Unit	Typical Value	Test Method
K-VALUE	-	70	ISO 1628-2
VOLATILE CONTENT	%	Max. 0.3	ISO 1269
METHANOL EXTRACT	%	1.7	ASTM D 2222 ISO 599
PH (AQUEOUS EXTRACT)	-	8.5	ISO 1264
BULK DENSITY	g/cm3	0.32	ISO 60
PARTICLE SIZE			
retained on 106 um	%	0.005	ISO 1624
retained on 63 um	%	0.75	
PASTE VISCOSITY *			
Brookfield@20 rpm	Poise (Pa. s)	300 (30)	ISO 2555/4575
Servers@90 psi	Poise (Pa. s)	450 (45)	ASTM D - 1823

* Paste made from 100 parts PVC and 70 parts DOP, measured after one hour aging.

NOTICE: The information and data contained herein are believed to be correct and given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of product, no warranty is given or is to be implied with respect to such information, nor do we offer any warranty of immunity against infringement.

Saudi Basic Industries
Corporation
P.O.Box 5101, Riyadh 11422
Kingdom of Saudi Arabia
Tel: 966 1 2258000
Fax: 966 1 2259000
Customers Technical Support
Tel: 966 1 2651661
Fax: 966 1 2653544
Toll-free 800 1245577
PVC Sales:
Fax: 966 1 2259070
Website: www.sabic.com

Applications

Pastes made from PVC 701E are ideal for compact, clear thin coating, and also for chemically blown spread coatings with low plasticizer content.

PVC 701E pastes are particularly suitable for:

- Spread coating of compact layers of low-to-medium plasticizer levels having good mechanical properties (conveyer bells, 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. PVC 701E is also suitable for other processes, e.g. rotational molding, slush molding and dipping.

Plastisol Preparation

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.

Packaging and Storage

PVC 701E is delivered in paper bags filled using a filling valve. PVC 701E 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 24 °C as possible), to avoid unfavorable effects on processability.