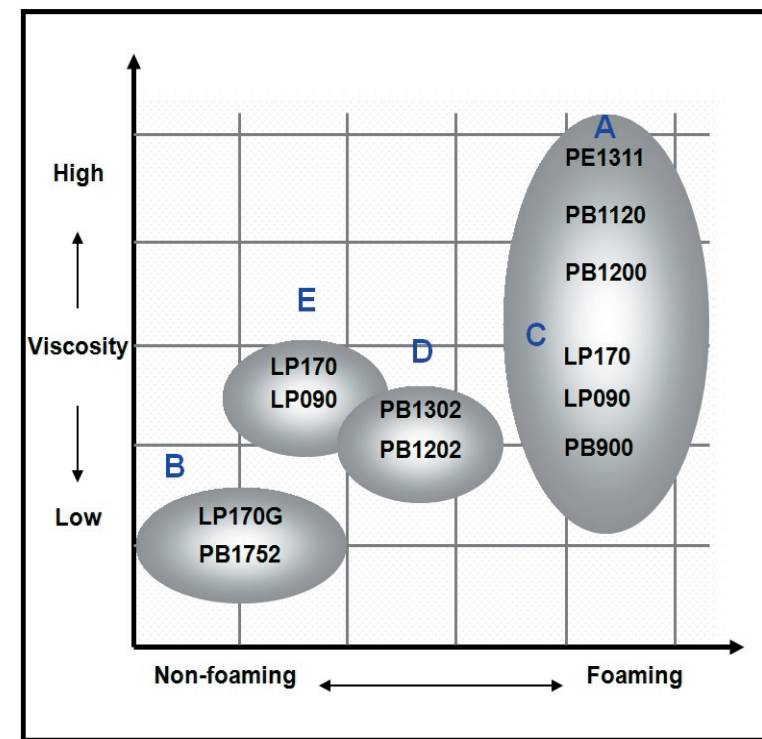


## LG Paste PVC (Emulsion PVC)

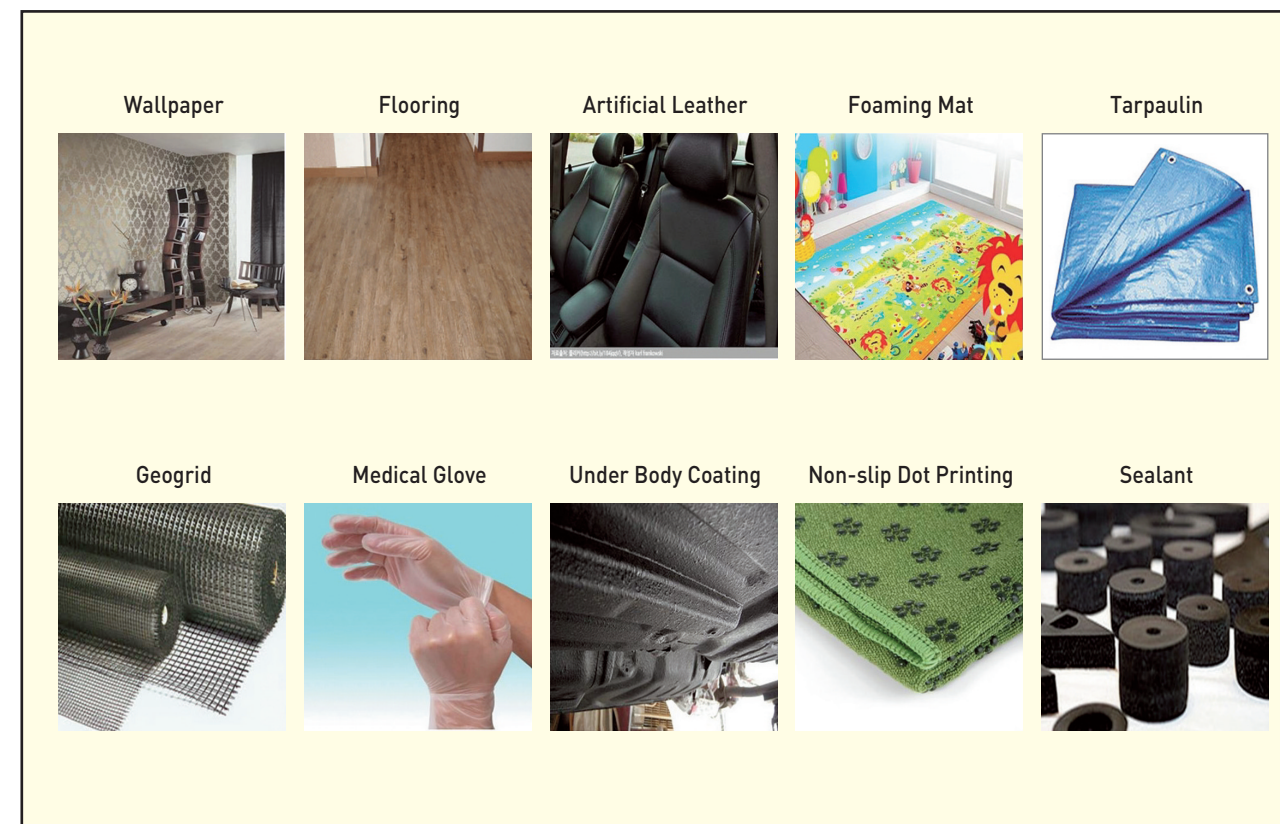
### LG Paste PVC (Emulsion PVC)



### Properties of PVC

- DP (K-value)**
    - The length of the molecular chains in the PVC
    - A higher K value provides better mechanical properties, provided the gelation conditions are adequate
  - Viscosity**
    - Brookfield Viscosity in case of a given proportion of plasticizer
    - In most cases low viscosity is preferred, however according to the process it could be changed
  - Foaming Properties**
    - For chemical foaming process, degree of foaming quality
    - Foaming ratio, color, cell structure, etc
- A :** High foam products (Mat, High foam layer, etc.)  
**B :** Non-foam products (Skin layer, Carpet tile, Toy, Glove, etc.)  
**C :** Foam products (Wallpaper, Synthetic leather, etc.)  
**D :** Foam/Non-foam products (Tarpaulin, Synthetic leather, etc.)  
**E :** Non-foam products (Automotive, etc.)

### Applications of Emulsion PVC



### LG Emulsion PVC Grades

Polymerization	Grade	K-value	Brookfield Viscosity	Characteristic
Micro-Suspension	LP090	64	4,500 ± 2,000	Low Viscosity, Excellent Foam Properties, Low Aging Plastisol Excellent Foam Properties, Good Mechanical Properties Excellent De-aeration Properties, Low & Stable Viscosity Acetate Co-Polymer (VAc 3.5%), Low Fusion Temperature
	LP170	74	5,500 ± 2,000	
	LP170G	76	4,000 ± 1,000	
	LK170	75	4,000 ± 1,500	
Micro-Seeded	PB900	64	6,000 ± 2,500	Low Viscosity, Excellent Foam Properties, Good White Color Excellent Foam Properties, Chemical Embossing Medium-High Viscosity, Good Pseudo-Plastic Property Foam Properties, Low Viscosity, High Surface Gloss Low Viscosity, Low Fusion Temperature High Transparency, High Tensile Strength, Very Low Viscosity Very High Viscosity, Excellent Pseudo-Plastic Property Acetate Co-Polymer (VAc 3.0%), Low Flow Properties
	PB1120	66	30,000 ± 15,000	
	PB1200	69	12,500 ± 7,500	
	PB1202	67	4,000 ± 2,000	
	PB1302	70	3,500 ± 2,000	
	PB1752	76	3,000 ± 2,000	
	PE1311	70	35,000 ± 25,000	
	PA1302	70	12,000 ± 8,000	
Specialty	LB100M	-		Reducing Plastisol Viscosity, Low Gloss, Matt Effect Reducing Plastisol Viscosity(Modified Rheological Behavior)
	LB110	64		

### Applications of LG Emulsion PVC Grades

Applications		LG'sGrades	Basic Formulations (in Korea)
Wallpaper (Foaming)		PB900, PB1120, LP090	PVC 100 + Plasticizer 80 + Filler 100 + Blowing agent 3 + TiO2 12.5 + Heat stabilizer 3 + Viscosity agent ~10
Artificial Leather (Foaming)		PB1120, PB1200, PB1202, PB1302, LP090, LP170	PVC 100 + Plasticizer 70 + Filler 50 + Blowing agent 3 + Heat stabilizer 3
Flooring	Skin	PB1752, LP170	PVC 100 + Plasticizer 45 + Heat stabilizer 3 + viscosity agent ~10 + UV absorber 0.2
	Foaming	PB1120, PB1200, PE1311, LP090, LP170	PVC 100 + Plasticizer 55 + Filler 80 + Blowing agent 6.5 + Heat stabilizer 3 + Viscosity agent ~5
Tarpaulin		PB1202, PB1302, PB1752	PVC 100 + Plasticizer 75 + Filler 30 + Heat stabilizer 3
Mat (Foaming)		PB1120, PB1200, PE1311, LP090, LP170	PVC 100 + Plasticizer 100 + Filler 20 + Blowing agent 7 + Heat stabilizer 3
Medical Glove		LP170G	PVC100 + Plasticizer 80 + 2 <sup>nd</sup> Plasticizer 10 + Heat stabilizer 1.5 + Viscosity agent ~10
Under Body Coating		PA1302, LK170(Co polymer) PB1202, LP090, LP170(Homo polymer) LB110(Blend Resin)	-

### Packing Type



- Suspension Resins : Paper Bag (25kg), Jumbo Bag, Sea-bulk.
- Emulsion Resins : Paper Bag (20kg), Jumbo Bag.

### Contact

(As of April 2014)

Product	Name	E-mail address	Region in charge of
Suspension	Taekyu (Anakin) Jung	freshgum@lgchem.com	India
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	Joon Lee	leejoon@lgchem.com	India
	Sanghyuck (Shaun) Nam	namsh@lgchem.com	Middle East, Turkey
	Michael Chang	zhangyuzhen@lgchem.com	Africa, Europe, China
Emulsion	Jaewoo Park	jaewoo@lgchem.com	America, CIS, Oceania, S.E Asia
	Benjamin Cho	windy@lgchem.com	Russia, M/East, Turkey
	Yestin Lee	flydung@lgchem.com	Europe, America, S.E Asia, Japan
	Billy Choi	superchoi@lgchem.com	China, India, South West Asia

## Product Information

[www.chemwide.com](http://www.chemwide.com)

### General Description

PB1202, homopolymer made by micro-suspension seeded polymerization, PVC Resin has a fluid property similar to Newtonian fluidity (low-viscosity) It is mainly used for non-foaming products by coating, also used for foaming products. It is wide used for products in which plasticizer is rarely added.

### Main Applications

Synthetic leather, Flooring, Wall coverings, Gloss surface layer

### Resin Properties

Parameter	Test Method	Unit	Test Condition	Typical Value
K-Value	DIN53726 / ISO1628-2	-	-	67
Degree of Polymerization	JIS K 6720-2	-	30	1,050 ± 50
Apparent Bulk Density	ASTM D1895	g/cm <sup>3</sup>	-	0.36 ± 0.05
Volatiles	ASTM D3030	%	110 , 1hr	Max. 0.3
B.F Viscosity	ASTM D1824	cps	DOP 60part	4,000±2,000
S.V Viscosity	ASTM D1823	g/sec	DOP 60part	Min. 2.0

### Packaging

Paper bag(20kg), Jumbo bag

#### Certificate Numbers

ISO 9001:2000 00048-1997-AQ-SEO-RvA (rev.1)  
ISO 14001:2004 0008-1996-AE-SEO-RvA  
OHSAS 18001:1999 0015-2000-HSO-SEO-DNV (rev.1)

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