

## General properties

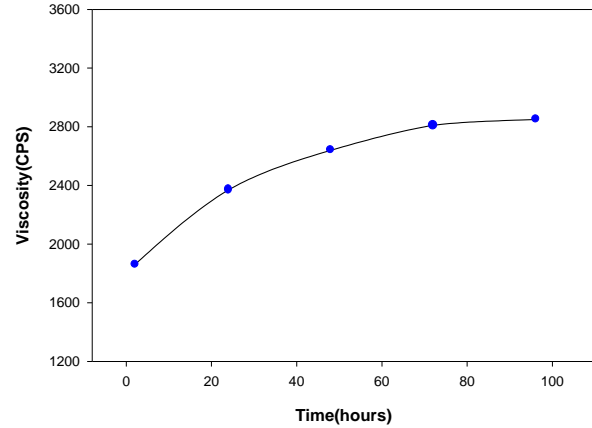
**KH-31G** is a high molecular weight micro-suspension type PVC homopolymer.

It produces plastisol exhibiting low viscosity at low shear rate and low viscosity aging property with medium-high plasticizer level (60~100 phr).

Plastisol made from this polymer exhibits the following properties:

- ▶ low viscosity and low viscosity aging rate-long shelf life with little tendency to sediment.
- ▶ good dispersion property and very low content of coarse particles with every type of mixers.
- ▶ high speed coating, good processibility and very thin coating.
- ▶ good air release and low gelling temperature.
- ▶ good heat resistance and good transparency.
- ▶ low moisture content and low heat loss.

## Viscosity Aging



Brookfield Viscometer  
No.4 Spindle  
20rpm

Formulation  
PVC 100  
DOP 70 phr

## Polymer properties

<i>Property</i>	<i>Unit</i>	<i>Typical Value</i>	<i>Test Method</i>
Polymerization Degree	-	1600 ± 100	JIS 6721
K-value	-	74.4~76.4	JIS 6721
Apparent Bulk Density	g/cc	0.20~0.40	JIS 6721
Volatile Content	%	Max. 0.35	JIS 6721
Particle Size	%	100	100 mesh pass
BF viscosity(20rpm)	Pa.s	2	ASTM D
Viscosity at 500 sec <sup>-1</sup>	Pa.s	9	1824

BF viscosity test conditions:

PVC 100

DOP 70 phr

1 hour aged at 25 °C

## Applications

**KH-31G** produces plastisols which are ideal for the manufacture of vinyl gloves by dip molding.

**KH-31G** plastisols are also ideal for the dip molding of vinyl gloves with very thin thickness at low oven temperatures and with excellent mechanical properties.

**KH-31G** can be applied by spread coatings coating, rotational and slush molding

The main applications are

- ▶ vinyl gloves with very thin thickness, transparency and medium-high mechanical properties
- ▶ rotational moldings, slush moldings and dip coatings with good mold release where high mechanical properties are required
- ▶ low plasticizer content spread coatings, clarity top coating application requiring high mechanical properties.
- ▶ slush molding process which produces rain boots, shoes, car arm rests and parts for the interiors of motor vehicles.

## Guide formulations

If plastisol is made with KH-31G, very excellent gloves can be produced. KH-31G can be used in wide application of gloves (sterile and Non-sterile, clear and color, pre-powered and powder etc.)

<b>Vinyl Gloves</b>	
KH-31G	100 phr
DOP	60~ 100 phr
DOA	0 ~ 10 phr
Stabilizer(Ca-Zn Type)	2 ~ 3 phr
Diluent	as required
Pigment	as required

<b>Toy</b>	
KH-31G	100 phr
Blend Resin	0~20 phr
DOP	75 phr
Epoxy Plasticizer	3 phr
Stabilizer	3 phr
Diluent	as required
Pigment	as required