

General properties

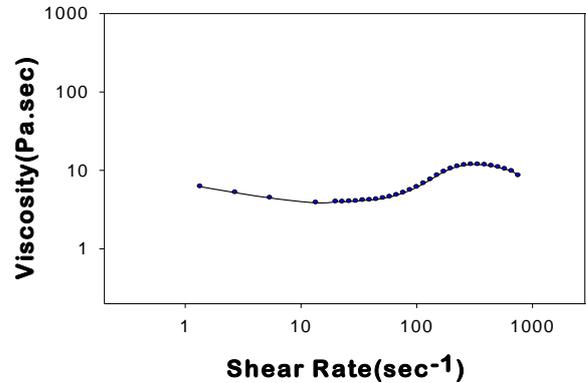
KCH-12 is a medium molecular weight micro-suspension VC/VAc copolymer.

It produces plastisol exhibiting low to medium viscosity at low shear rate and dilatancy at high shear rates with low-medium plasticizer level (50~70 phr).

Plastisols made from this polymer exhibit the following properties.

- ▶ low to medium viscosity and moderate viscosity aging rate, long shelf life with little tendency to sediment
- ▶ fast gelation, good air release
- ▶ good adhesion properties with fabrics
- ▶ low water absorption
- ▶ fast mixing/dispersion properties with every type of mixers

Rheological properties



1 hour aged at 25 °C

Formulation
PVC 100
DOP 65 phr

Polymer properties

<i>Property</i>	<i>Unit</i>	<i>Typical Value</i>	<i>Test Method</i>
Polymerization Degree	-	1400 ± 100	JIS 6721
K-value	-	71.5~74.4	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
VAcM Content	%	5 ± 2	HSC Method
BF viscosity(20rpm)	Pa.s	Max.4500	ASTM D
Viscosity at 500 sec ⁻¹	Pa.s	12	1824

BF viscosity test conditions:

PVC 100
DOP 65 phr
1 hour aging at 25 °C

Applications

KCH-12 produces plastisols which are ideal for temperature-sensitive substrate coatings, adhesive coatings, carpet tile backing and manufacture of automotive sealing compound.

KCH-12 plastisols are also ideal for high mechanical strength with low temperature fusion.

KCH-12 can be applied by spread coatings and rotational molding, dip coating and the casting process.

The main applications are

- ▶ carpet tile backing with high filler loading, good adhesion and high mechanical strength
- ▶ adhesion of unsupported synthetic leather and film or sheets to supporting textiles by spread coating process
- ▶ temperature-sensitive cloth and textile coatings with a good adhesion property
- ▶ car underbody coating with low viscosity aging and low fusion temperature

Guide formulations

Carpet tile backing	
KCH-12	80~100 phr
Blend Resin	20~0
DOP	75~90
DOA	10~0
Stabilizer	2
Filler	100~300
Viscosity depressant	as required
Pigment	as required

Adhesives for Synthetic Leather	
KCH-12	100 phr
DOP	60~80
Stabilizer	2
Diluent	as required