



## PVC Paste Resin (Homopolymer)

# KM-31

### General properties

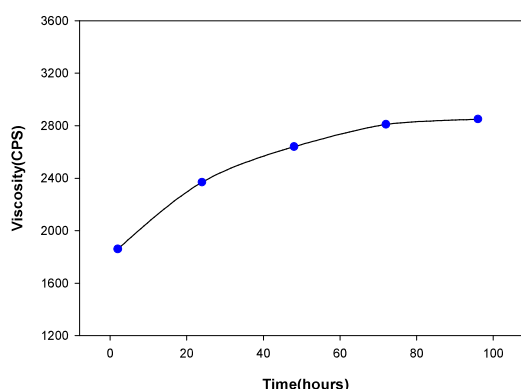
**KM-31** is a medium molecular weight micro-suspension type PVC homopolymer.

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



1 hours aged at 25 °C

Formulation  
PVC 100  
DINP 60 phr

### Polymer properties

| Property                           | Unit | Typical Value | Test Method   |
|------------------------------------|------|---------------|---------------|
| Polymerization Degree              | -    | 1300±50       | JIS K 6720-2  |
| K-value                            | -    | 72            | DIN 53726     |
| Apparent Bulk Density              | g/cc | 0.33±0.05     | ASTM D 1895   |
| Volatile Content                   | %    | Max. 0.30     | ASTM D 3030   |
| 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

DINP 60 phr

1 hours aged at 25 °C



The information given herein and other otherwise supplied to users is based on our general experience and where applicable, on the results of tests on samples of typical manufacture. However, because of the many factors which are outside knowledge and control, which can effect the use of these products, users must rely on their own judgment and we cannot accept liability for any injury, loss or damage resulting from reliance upon such information.



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### Applications

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

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

**KM-31** 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 medium-high mechanical properties are required

### Guide formulations

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

| Vinyl Gloves           |             |
|------------------------|-------------|
| KM-31                  | 100 phr     |
| DOP                    | 60~ 100     |
| DOA                    | 0 ~ 10      |
| Stabilizer(Ca-Zn Type) | 2 ~ 3       |
| Diluent                | as required |
| Pigment                | as required |

| Toy               |             |
|-------------------|-------------|
| KM-31             | 100 phr     |
| Blend Resin       | 0~20        |
| DOP               | 75          |
| Epoxy Plasticizer | 3           |
| Stabilizer        | 3           |
| Diluent           | as required |
| Pigment           | as required |



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