

|        |          |    |           |                |     |   |   |   |                                                                                                                                                       |                                                                           |
|--------|----------|----|-----------|----------------|-----|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| P-2500 | 2500±200 | 83 | 0.45±0.07 | Less than 0.30 | 100 | - | - | - | High thermal-resistance, weather-proof, cold-resistance and mechanical strength. It can have rubber elasticity by adding large amount of plasticizer. | Special heat-resistant electric cable covering, flexible hose and leather |
|--------|----------|----|-----------|----------------|-----|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|

## PVC Copolymers

| Item    | Degree of Polymerization (DP) | Degree of Polymerization (K-Value) | Apparent Specific Gravity (g/cc) | Volatile Matter (%) | Particle Size (%) | VAcM Content (%) | Feature                                                                                                                      | Use                                                                             |
|---------|-------------------------------|------------------------------------|----------------------------------|---------------------|-------------------|------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| CP-490  | 490±50                        | 50                                 | 0.77±0.07                        | Less than 4.0       | 100               | 15.0±1           | High agent solution capability, High adherence, transparency and liquidity. Good for Gravure ink.                            | Gravure ink, glue and paint                                                     |
| CP-450  | 550±50                        | 53                                 | 0.58±0.07                        | Less than 4.0       | 100               | 13.5±1           | High workability, plasticity and thermal safety. High liquidity. Good for general glue.                                      | Paint, glue and ink                                                             |
| CP-705  | 700±50                        | 58                                 | 0.56±0.07                        | Less than 4.0       | 100               | 5.5±1            | High initial coloring capability, workability and plasticity. Good for tile production.                                      | Tile and hard plate                                                             |
| CP-710  | 700±50                        | 58                                 | 0.54±0.07                        | Less than 4.0       | 100               | 10.0±1           | High adherence, workability and abrasion-resistance. Good for thermal-resistant materials as it has high thermal-resistance. | Reinforcement of pencil lead, thermal-resistance for ink and strippable coating |
| TP-400M | 430±50                        | 50                                 | 0.66±0.07                        | Less than 4.0       | 100               | 14.0±1           | High adherence for metal. Good for painting and aluminum coating.                                                            | Metal coating, aluminum printing ink, heat sealable and plastic coating         |

## MSP Resins

| Item   | Degree of Polymerization (DP) | Degree of Polymerization (K-Value) | Apparent Specific Gravity (g/cc) | Volatile Matter (%) | Particle Size (%) | VAcM Content (%) | B.F. Viscosity (cps/6rpm) | Liquidity | Feature                                                                                                                    | Use                                                                                                           |
|--------|-------------------------------|------------------------------------|----------------------------------|---------------------|-------------------|------------------|---------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| KH-10  | 1700±100                      | 76                                 | 0.27±0.04                        | Less than 0.30      | 100               | -                | Less than 4,000           | Dilatant  | Low viscosity, low deterioration and low absorption. High insulating resistance and high transparency.                     | General use, slush forming, rotational forming, erasers, DP forming, flooring/wall paper/leather top coatings |
| KH-31G | 1600±50                       | 75                                 | 0.29±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity and low deterioration. High transparency. High thermal stability.                                            | Medical gloves, flooring/wall paper/ leather top coatings                                                     |
| KH-31S | 1600±50                       | 75                                 | 0.29±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity and low deterioration. High thermal stability with form cell. Soft texture after forming.                    | Casting leather and form products (wall paper and mats)                                                       |
| KH-60  | 1700±100                      | 76                                 | 0.23±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity and high transparency. Excellent water-whitening resistance. Excellent autoclave applications.               | Highly transparent label, flooring wall paper, leather top coatings, tarpaulins and rotational forming        |
| KM-31  | 1300±50                       | 72                                 | 0.29±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity, low deterioration and no plate-out. Excellent autoclave applications, good foam cell and fast gelling.      | Casting leather, foam materials (wall paper and flooring) and erasers                                         |
| KM-60  | 1250±50                       | 71                                 | 0.23±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity, low deterioration and no plate-out. High transparency, high autoclave, and high Water-whitening Resistance. | Tarpaulins and transparent labels                                                                             |
| KL-10  | 1000±100                      | 66                                 | 0.29±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity, low deterioration and low absorption. Faster gelling than KH products.                                      | Low viscosity and low temperatures sealants                                                                   |
| KL-31  | 1000±50                       | 66                                 | 0.29±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | High foam cell/fast gelling. Good for floor materials and foamed wall paper.                                               | Wall paper, flooring, low melting temperature foaming agents and leathers                                     |
| KL-701 | 750±50                        | 59                                 | 0.23±0.04                        | Less than 0.30      | 100               | -                | Less than 10,000          | Dilatant  | Low viscosity, fast gelling. Low temperature processing is possible due to low degree of polymerization. High foaming.     | Low melting temperature, wall paper and low temperature foaming materials                                     |
| KCM-12 | 1000±50                       | 66                                 | 0.23±0.04                        | Less than 0.80      | 100               | 5.5±1            | Less than 5,000           | Dilatant  | Copolymer of VCM and VAcM. Fast gelling. Contains 5% of VAcM. Strong adherence.                                            | Ultra-low temperature melting, adhesive SOL, carpet backing and under-body coatings                           |
| KCH-12 | 1400±50                       | 73                                 | 0.23±0.04                        | Less than 0.80      | 100               | 5.5±1            | Less than 5,000           | Dilatant  | Low viscosity, fast gelling. Contains 5% of VAcM. Strong adherence.                                                        | Low melting temperature, adhesive SOL, carpet backing and under-body coatings                                 |
| KCH-15 | 1700±100                      | 76                                 | 0.23±0.04                        | Less than 0.80      | 100               | 5.5±1            | Less than 5,000           | Dilatant  | High adhesiveness for metal and high anti-corrosion. Contains 5% of VAcM. Low viscosity and low deterioration.             | Under-body coatings, carpet backing and chipping-proof paint                                                  |

## Blend Resins

| Item   | Degree of Polymerization (DP) | Degree of Polymerization (K-Value) | Apparent Specific Gravity (g/cc) | Volatile Matter (%) | Particle Size (%) | VAcM Content (%) | B.F. Viscosity (cps/6rpm) | Liquidity | Feature                                                                                               | Use                                                                                           |
|--------|-------------------------------|------------------------------------|----------------------------------|---------------------|-------------------|------------------|---------------------------|-----------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| KBM-4  | 1000±50                       | 66                                 | 0.40±0.07                        | Less than 0.30      | 100               | -                | -                         | -         | Used for battery separators. Diameter: about 26µm                                                     | Battery separator                                                                             |
| KBM-10 | 1000±50                       | 66                                 | 0.45±0.07                        | Less than 0.30      | 100               | -                | -                         | -         | Blending Resin. Diameter: about 28µm. Viscosity decreasing and non-glare effect.                      | SOL viscosity decreasing resin (floor material, wall paper, tarpaulin, toy and sealant)       |
| HB-65  | 900±50                        | 63                                 | 0.60±0.10                        | Less than 0.30      | 100               | -                | -                         | -         | Blending Resin. Diameter: about 30µm. Viscosity decreasing and non-glare effect.                      | SOL viscosity decreasing resin (floor material, wall paper, tarpaulin, toy and sealant)       |
| HB-100 | -                             | -                                  | 0.50±0.10                        | Less than 0.30      | 100               | -                | -                         | -         | Blending Resin for non-glare effect. Diameter: about 30µm. Viscosity decreasing and non-glare effect. | Non-glare enhancing resin (wall paper, tarpaulin). S-PVC non-glare/improvement of workability |

## Emulsion Resins

| Item    | Degree of Polymerization (DP) | Degree of Polymerization (K-Value) | Apparent Specific Gravity (g/cc) | Volatile Matter (%) | Particle Size (%) | VAcM Content (%) | B.F. Viscosity (cps/6rpm) | Liquidity            | Feature                                                                                                                                                    | Use                                                                                    |
|---------|-------------------------------|------------------------------------|----------------------------------|---------------------|-------------------|------------------|---------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| EL-102  | 900±50                        | 63                                 | 0.28±0.07                        | Less than 0.30      | 100               | -                | Less than 20,000          | Newtonian            | Very low viscosity. High foaming and high whiteness. Good for environmentally-friendly wall paper.                                                         | Environmentally-friendly wall paper and rotary screen wall paper                       |
| EL-103  | 900±50                        | 63                                 | 0.28±0.07                        | Less than 0.30      | 100               | -                | Less than 20,000          | Newtonian            | High viscosity and liquidity. High foaming and high whiteness.                                                                                             | Silk wall paper, rotary screen wall paper and low temperature melting foaming material |
| EL-203M | 1000±50                       | 66                                 | 0.33±0.07                        | Less than 0.30      | 100               | -                | Less than 20,000          | Pseudoplastic        | High foaming/high whiteness. Good for high foaming material.                                                                                               | Silk wall paper, rotary screen wall paper, high foaming material and mats              |
| EM-2070 | 1150±50                       | 69                                 | 0.28±0.07                        | Less than 0.30      | 100               | -                | Less than 75,000          | Pseudoplastic        | Ideal autoclave applications and low subsidence/low viscosity. Good for fast coating as a filler.                                                          | Tarpaulin, flooring and leather                                                        |
| EM-304  | 1150±50                       | 69                                 | 0.28±0.07                        | Less than 0.30      | 100               | -                | Less than 30,000          | Pseudoplastic        | Mid-viscosity and high foaming. Good for high foaming purposes.                                                                                            | Flooring, high foaming materials, mats, leather and sealants                           |
| EM-3090 | 1150±50                       | 69                                 | 0.28±0.07                        | Less than 0.30      | 100               | -                | Less than 100,000         | Highly Pseudoplastic | Excellent viscosity, high yield value and high thermal stability. Low temperature gelling. Good for high foaming materials. Excellent viscosity stability. | Cotton (felt) coating, wall paper, high soft leather, sealants and tarpaulins          |

### Package

**PVC Straight Resins:**  
Paper Bag (25kg), Picon Bag (500kg), Bulk  
**PVC Copolymers:**  
Paper Bag (25kg), Picon Bag (500kg), Bulk  
**MSP Resins:** Paper Bag (20kg), Bulk  
**Blend Resins:** Paper Bag (20kg/25kg), Bulk  
**Emulsion Resins:** Paper Bag (25kg), Bulk

### Storage

**PVC Resins:** Store PVC Resins in a cool, dry, properly-ventilated space away from direct sunlight, and reserves store Resins near heating equipment, open flames, or areas with high humidity.

### Particle size testing method

**PVC Straight Resins/Copolymers:**  
42Mesh (350µm) Sieve Pass %  
**MSP Resins, Emulsion Resins:**  
100Mesh (150µm) Sieve Pass %  
**Blend Resins:** 60Mesh (250µm) Sieve Pass %

### Viscosity Measuring Condition

**MSP Resins, Blend Resins:** Resin 100phr, DOP 65phr, 30°C after one hour  
ROTA No.3 6rpm, LV Type B.F. Viscometer (Except, over 100phr DOP should be used for KM-30)  
**Emulsion Resins:** RV Type B.F. Viscometer (30°C, one hour, 20rpm)  
EL-102, EL-103: Resin 100phr, DOP 65phr, ROTA No.3  
EL-203M: Resin 100phr, DOP 65phr, ROTA No.4  
EM2070, EM2075: Resin 100phr, DOP 40phr, ROTA No.6  
EM304: Resin 100phr, DOP 60phr, ROTA No.6

K-value is a reference value which is converted from the degree of polymerization with the use of conversion table of PVC Technology, 4th edition, W.V.TITOW, P44-45.

The data and technical information in this catalog are based on the aggregate experience and knowledge of Darveco Chemical and its subcontractors, in addition to the results of tests conducted on PVC, paste resin and plasticizer samples.