

# SPESIN<sup>®</sup> KP515G45BK

PBT/PET + GF 45%, Black color, High Impact, Injection Molding

## Application

Auto(Wiper blade)

| Properties                       | Measurement condition       | Test Method | Unit                       | Typical value |
|----------------------------------|-----------------------------|-------------|----------------------------|---------------|
| <b>Physical</b>                  |                             |             |                            |               |
| Density                          |                             | ASTM D792   | -                          | 1.62          |
| Shrinkage                        |                             | ASTM D955   | %                          | 0.3~0.8       |
| Water Absorption                 | 23℃, H <sub>2</sub> O, 24hr | ASTM D570   | %                          | 0.05          |
| <b>Mechanical</b>                |                             |             |                            |               |
| Tensile Strength at Break        | (3.2mm) 5 mm/min            | ASTM D638   | MPa                        | 140           |
| Elongation at Break              | (3.2mm) 5 mm/min            | ASTM D638   | %                          | 5             |
| Flexural Strength                | (3.2mm) 5 mm/min            | ASTM D790   | MPa                        | 235           |
| Flexural Modulus                 | (3.2mm) 5 mm/min            | ASTM D790   | MPa                        | 10,750        |
| Izod Impact Strength             | (6.4mm)                     | ASTM D256   |                            |               |
| (Notched)                        | 23 ℃                        |             | J/m                        | 100           |
|                                  | -30 ℃                       |             | J/m                        | -             |
| <b>Thermal</b>                   |                             |             |                            |               |
| Melting Point                    | 20 ℃/min                    | ASTM D3418  | ℃                          | 255           |
| Heat Deflection Temperature      | 1.82 MPa                    | ASTM D648   | ℃                          | 210           |
| Coefficient of linear expansion  |                             | ASTM D696   | × 10 <sup>-4</sup> cm/cm·℃ | -             |
| Flammability                     | (0.8mm)                     | UL94        | Class                      | HB            |
| <b>Electrical</b>                |                             |             |                            |               |
| Comparative Tracking Index (CTI) |                             | UL 746 A    | PLC                        | -             |
| Dielectric Strength              | (1mm)                       | IEC 60243   | kV/mm                      | -             |
| Volume Resistivity               |                             | IEC 60093   | Ω·cm                       | -             |
| Surface Resistivity              |                             | IEC 60093   | Ω/sq                       | -             |



Processing Guide (Injection Molding)

|                                 |         |                       |         |         |  |
|---------------------------------|---------|-----------------------|---------|---------|--|
| Drying Temperature(℃)           | 100~120 | (Dehumidifying Dryer) |         |         |  |
| Drying Time(hr)                 | 3~5     |                       |         |         |  |
| Processing Moisture Contents(%) | ≤ 0.04  |                       |         |         |  |
| Cylinder Temperature(℃)         | Nozzle  | Front                 | Middle  | Rear    |  |
|                                 | 250~280 | 255~285               | 250~275 | 240~265 |  |
| Mold Temperature(℃)             | 60~100  |                       |         |         |  |

