

## Data Sheet of SKYPET-BB

● Injection Molded Property (ASTM Method)

| Property  | Test Method            | Unit                              | Typical Values                       |
|---|------------------------|-----------------------------------|--------------------------------------|
| <b>Physical</b>                                     |                        |                                   |                                      |
| Specific Gravity                                    | ASTM D792              | -                                 | 1.34                                 |
| Mold Shrinkage Parallel to Flow                     | ASTM D955              | %                                 | 0.3 – 0.6                            |
| Rockwell Hardness                                   | ASTM D785              | R-scale                           | 115                                  |
| Water Absorption (24 hr immersion)                  | ASTM D570              | %                                 | < 0.3                                |
| <b>Mechanical</b>                                   |                        |                                   |                                      |
| Tensile Strength @ Yield<br>50mm/min (2 inch/min)   | ASTM D638              | MPa (kgf/cm <sup>2</sup> )<br>psi | 57 (601)<br>8557                     |
| Tensile Strength @ Break<br>50mm/min (2 inch/min)   | ASTM D638              | MPa (kgf/cm <sup>2</sup> )<br>psi | 23 (245)<br>3480                     |
| Elongation @ Yield<br>50mm/min (2 inch/min)         | ASTM D638              | %                                 | 3.9                                  |
| Elongation @ Break<br>50mm/min (2 inch/min)         | ASTM D638              | %                                 | 112                                  |
| Flexural Strength<br>1.27mm/min (0.05 inch/min)     | ASTM D790              | MPa (kgf/cm <sup>2</sup> )<br>psi | 83 (846)<br>12038                    |
| Flexural Modulus<br>1.27mm/min (0.05 inch/min)      | ASTM D790              | MPa (kgf/cm <sup>2</sup> )<br>psi | 2330 (23759)<br>3.38×10 <sup>5</sup> |
| Izod Impact Strength,<br>Notched @ 23 °C(73 °F)     | ASTM D256              | J/m(kgf · cm/cm)                  | 37                                   |
| Izod Impact Strength,<br>Notched @ -40 °C(73 °F)    | ASTM D256              | J/m(kgf · cm/cm)                  | 20                                   |
| <b>Thermal</b>                                      |                        |                                   |                                      |
| Heat Distortion Temperature<br>@ 0.455 MPa(66 psi)  | ASTM D648              | °C (°F)                           | 69 (156)                             |
| <b>Optical</b>                                      |                        |                                   |                                      |
| Haze  | ASTM D1003             | %                                 | < 1.0                                |
| Total Transmittance                                 | ASTM D1003             | %                                 | 88                                   |
| <b>Melt</b>   |                        |                                   |                                      |
| Melt Viscosity @ 275 °C<br>Shear Rate = 10000(1/s)  | Capillary<br>Rheometer | poise                             | 745                                  |
| <b>Flammability</b>                                 |                        |                                   |                                      |
| UL Flammability Classification<br>@ 3.0mm thickness | UL 94                  | -                                 | HB                                   |

