

| Property                             | Test Condition       | Test Method ISO | Units                  | GF reinforced               |
|--------------------------------------|----------------------|-----------------|------------------------|-----------------------------|
|                                      |                      |                 |                        | GF40%, Toughness, Low flash |
|                                      |                      |                 |                        | A604-X95                    |
|                                      |                      |                 |                        | >PPS-GF40<                  |
| Physical property                    |                      |                 |                        |                             |
| Water Absorption                     | 24hrs. in 23℃ water  | ISO62           | %                      | 0.02                        |
| Density                              | 23℃                  | ISO1183         | kg/m <sup>3</sup>      | 1660                        |
| Color                                |                      |                 |                        | Natural/Black               |
| Mechanical property                  |                      |                 |                        |                             |
| Tensile strength                     | 23℃                  | ISO527-1,2      | MPa                    | 190                         |
| Elongation at Break                  | 23℃                  | ISO527-1,2      | %                      | 1.7                         |
| Flexural Strength                    | 23℃                  | ISO178          | MPa                    | 290                         |
| Flexural Modulus                     | 23℃                  | ISO178          | GPa                    | 15                          |
| Coefficient of friction              | Vs metal             | -               | -                      | 0.25                        |
| Shear Strength                       | 23℃                  | JIS K7214       | MPa                    | 75                          |
| Rockwell Hardness                    |                      | ISO2039-2       | R Scale                | 122                         |
| Taper Abrasion                       |                      | ISO9352         | mg/1000times           | 50                          |
| Charpy Impact Strength (V-notched)   | 23℃                  | ISO179          | kJ/m <sup>2</sup>      | 11                          |
| Charpy Impact Strength (Unnotched)   | 23℃                  | ISO179          | kJ/m <sup>2</sup>      | 45                          |
| Heat property                        |                      |                 |                        |                             |
| Melting Point                        |                      | ISO11357-3      | ℃                      | 278                         |
| Coef of Linear Thermal Expansion     | Machine Direction    | ISO11359-2      | ×10 <sup>-5</sup> /K   | 2.3                         |
| Coef of Linear Thermal Expansion     | Transverse Direction | ISO11359-2      | ×10 <sup>-5</sup> /K   | 3.5                         |
| Heat Deflection Temp High Load       | 1.80MPa              | ISO75-1,2       | ℃                      | 260                         |
| Flammability                         |                      | UL94            | rank/thickness m<br>mt | V-0 (0.20mmt)               |
| Electrical property                  |                      |                 |                        |                             |
| Volume Resistivity                   |                      | IEC60093        | Ω · m                  | 10 <sup>14</sup>            |
| Dielectric Strength                  |                      | IEC60243-1      | MV/m                   | 25                          |
| Dielectric Constant                  | 23℃、60%RH、1MHz       | IEC 60250       | -                      | 3.6                         |
| Dissipation Factor                   | 23℃、60%RH、1MHz       | IEC 60250       | -                      | 0.002                       |
| Molding property                     |                      |                 |                        |                             |
| Mold shrinkage(Machine Direction)    | 80×80×3mmt           | Toray Method    | %                      | 0.2                         |
| Mold shrinkage(Transverse Direction) | 80×80×3mmt           | Toray Method    | %                      | 0.8                         |
| Bar Flow                             | 320℃,98MPa,1mmt      | Toray Method    | ×10 <sup>-3</sup> m    | 165                         |

These values are typical data for this product under specific test conditions and not intended for use as limiting specifications.

