

| Property                                      | Test Condition      | Test Method ISO | Units                  | Flame retardant reinforced        |
|-----------------------------------------------|---------------------|-----------------|------------------------|-----------------------------------|
|                                               |                     |                 |                        | Heat cycle resistance, GF20%, V-0 |
|                                               |                     |                 |                        | 5174G-X11                         |
|                                               |                     |                 |                        | >PBT-I-GF20-FR(17)<               |
| Physical property                             |                     |                 |                        |                                   |
| Water Absorption                              | 24hrs. in 23℃ water | ISO 62          | %                      | 0.07                              |
| Density                                       | 23℃                 | ISO 1183        | kg/m <sup>3</sup>      | 1550                              |
| Mechanical property                           |                     |                 |                        |                                   |
| Tensile strength                              | 23℃                 | ISO 527-1,2     | MPa                    | 95                                |
| Elongation at Break                           | 23℃                 | ISO 527-1,2     | %                      | 3.1                               |
| Tensile Modulus                               | 23℃                 | ISO 527-1,2     | GPa                    | 6.6                               |
| Flexural Strength                             | 23℃                 | ISO 178         | MPa                    | 150                               |
| Flexural Modulus                              | 23℃                 | ISO 178         | GPa                    | 6.3                               |
| Coefficient of friction (Without lubrication) | Vs metal            | Suzuki Method   | -                      | 0.16                              |
| Coefficient of friction                       | Vs metal            | -               | -                      | 0.2                               |
| Rockwell Hardness                             | 23℃                 | ISO 2039-2      | R Scale                | -                                 |
| Charpy Impact Strength (V-notched)            | 23℃                 | ISO 179         | kJ/m <sup>2</sup>      | 8                                 |
| Charpy Impact Strength (Unnotched)            | 23℃                 | ISO 179         | kJ/m <sup>2</sup>      | 57                                |
| Heat property                                 |                     |                 |                        |                                   |
| Coef of Linear Thermal Expansion              | -30~100℃            | ISO 11359-2     | ×10 <sup>-5</sup> /℃   | 5                                 |
| Heat Deflection Temp Low Load                 | 0.45MPa             | ISO 75-1,2      | ℃                      | 220                               |
| Heat Deflection Temp High Load                | 1.82MPa             | ISO 75-1,2      | ℃                      | 207                               |
| Flammability                                  |                     | UL94            | rank/thickness m<br>mt | V0(1/16")                         |
| Electrical property                           |                     |                 |                        |                                   |
| Volume Resistivity                            |                     | IEC 60093       | Ω · m                  | -                                 |
| Dielectric Strength                           |                     | IEC 60243-1     | MV/m                   | -                                 |
| Dielectric Constant                           | 23℃、60% RH、50Hz     | IEC 60250       | -                      | 3.8                               |
| Dielectric Constant                           | 23℃、60% RH、1KHz     | IEC 60250       | -                      | 3.8                               |
| Dissipation Factor                            | 23℃、60% RH、50Hz     | IEC 60250       | -                      | 0.002                             |
| Dissipation Factor                            | 23℃、60% RH、1MHz     | IEC 60250       | -                      | 0.02                              |
| Arc resistance                                | W electrode         | IEC 60950       | sec                    | -                                 |
| Molding property                              |                     |                 |                        |                                   |
| Mold shrinkage(Machine Direction)             | 80×80×3mmt          | Toray Method    | %                      | 0.4                               |
| Mold shrinkage(Transverse Direction)          | 80×80×3mmt          | Toray Method    | %                      | 0.9                               |
| Bar Flow                                      | 250℃,93MPa,1mmt     | Toray Method    | ×10 <sup>-3</sup> m    | 113                               |

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

