

| Property                             | Test Condition       | Test Method ISO | Units                  | Long carbon fiber reinforced P<br>A6 |
|--------------------------------------|----------------------|-----------------|------------------------|--------------------------------------|
|                                      |                      |                 |                        | CF20%                                |
|                                      |                      |                 |                        | TLP1040                              |
|                                      |                      |                 |                        | >PA6-CF20<                           |
| Physical property                    |                      |                 |                        |                                      |
| Content of filler                    |                      | -               | wt%                    | 20                                   |
| Water Absorption                     | 23℃×50%RH in water   |                 | %                      | 2.85                                 |
| Density                              | 23℃                  | ISO1183         | kg/m <sup>3</sup>      | 1220                                 |
| Mechanical property                  |                      |                 |                        |                                      |
| Tensile strength                     | 23℃                  | ISO527-1,2      | MPa                    | 270                                  |
| Elongation at Break                  | 23℃                  | ISO527-1,2      | %                      | 2                                    |
| Flexural Strength                    | 23℃                  | ISO178          | MPa                    | 350                                  |
| Flexural Modulus                     | 23℃                  | ISO178          | GPa                    | 14                                   |
| Coefficient of friction              | Vs S45C、1MPa、0.33m/s | Suzuki Method   | -                      | -                                    |
| Coefficient of friction              | Vs SUS、1MPa、0.33m/s  | Suzuki Method   | -                      | -                                    |
| Amount of wear                       | Vs S45C、1MPa、0.33m/s | Suzuki Method   | mg/h                   | -                                    |
| Amount of wear                       | Vs SUS、1MPa、0.33m/s  | Suzuki Method   | mg/h                   | -                                    |
| Limit of PV                          | Vs S45C              | Suzuki Method   | Mpa · m/s              | -                                    |
| Limit of PV                          | Vs SUS               | Suzuki Method   | Mpa · m/s              | -                                    |
| Charpy Impact Strength (V-notched)   | 23℃                  | ISO179          | kJ/m <sup>2</sup>      | 13                                   |
| Heat property                        |                      |                 |                        |                                      |
| Melting Point                        |                      | DSC Method      | ℃                      | 225                                  |
| Heat Deflection Temp High Load       | 1.80MPa              | ISO75-1,2       | ℃                      | 210                                  |
| Flammability                         |                      | UL94            | rank/thickness m<br>mt | HBEquivalent                         |
| Electrical property                  |                      |                 |                        |                                      |
| Volume Resistivity                   |                      | IEC60093        | Ω · m                  | 10 <sup>-3</sup>                     |
| Molding property                     |                      |                 |                        |                                      |
| Mold shrinkage(Machine Direction)    | 80×80×3mmt           | Toray Method    | %                      | 0.1                                  |
| Mold shrinkage(Transverse Direction) | 80×80×3mmt           | Toray Method    | %                      | 0.2                                  |

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

