

# Torayca™ 3101T-30V

## Nylon 66

### TECHNICAL DATA

#### Product Description

CF30%

#### Uses

- Automotive Applications
- Computer Components
- Gears
- Printer

#### Processing Method

- Injection Molding

#### ISO Designation

- >PA66-CF30<

#### Type

- Short carbon fiber reinforced PA66

### ASTM & ISO Properties

| Physical                                         | Nominal Value | Unit                     | Test Method     |
|--------------------------------------------------|---------------|--------------------------|-----------------|
| Density (23°C)                                   | 1.27          | g/cm <sup>3</sup>        | ISO 1183        |
| Molding Shrinkage <sup>1</sup>                   |               |                          | Internal Method |
| Across Flow : 3.00 mm                            | 0.70          | %                        |                 |
| Flow : 3.00 mm                                   | 0.20          | %                        |                 |
| Water Absorption <sup>2</sup> (Saturation, 23°C) | 1.8           | %                        | ISO 62          |
| Mechanical                                       | Nominal Value | Unit                     | Test Method     |
| Tensile Strength (23°C)                          | 255           | MPa                      | ISO 527-2       |
| Tensile Strain (Break, 23°C)                     | 1.6           | %                        | ISO 527-2       |
| Flexural Modulus (23°C)                          | 20000         | MPa                      | ISO 178         |
| Flexural Stress (23°C)                           | 350           | MPa                      | ISO 178         |
| Amount of Wear - vs. S45C <sup>3</sup>           | 0.6           | mg/hr                    | Suzuki Method   |
| Coefficient of Friction - vs. S45C <sup>3</sup>  | 0.23          |                          | Suzuki Method   |
| Limiting Pressure Velocity - vs. S45C            | 2.6           | MPa·m/s                  | Suzuki Method   |
| Impact                                           | Nominal Value | Unit                     | Test Method     |
| Charpy Notched Impact Strength (23°C)            | 10.0          | kJ/m <sup>2</sup>        | ISO 179         |
| Thermal                                          | Nominal Value | Unit                     | Test Method     |
| Deflection Temperature Under Load                |               |                          | ISO 75-2/A      |
| 1.8 MPa, Unannealed                              | 255           | °C                       |                 |
| Melting Temperature                              | 265           | °C                       | DSC             |
| CLTE                                             |               |                          | ISO 11359-2     |
| Flow                                             | 1.6           | cm <sup>3</sup> -5/cm/°C |                 |
| Transverse                                       | 1.9           | cm <sup>3</sup> -5/cm/°C |                 |
| Electrical                                       | Nominal Value | Unit                     | Test Method     |
| Volume Resistivity                               | 0.010         | ohms·m                   | JIS K7194       |
| Surface Resistivity                              | 10            | ohms/cm <sup>2</sup>     | JIS K7194       |
| Flammability                                     | Nominal Value | Unit                     | Test Method     |
| Flame Rating (0.79 mm)                           | HB            |                          | UL 94           |

#### Notes

<sup>1</sup> 80x80x3mm

<sup>2</sup> 50% RH

<sup>3</sup> 1MPa, 0.33 m/s

