

GLAMIDE™ TY-161GHV-C  
TOYOBO MC Corporation - Polyamide 6

| General Information                   |                                                          |                                                |                 |
|---------------------------------------|----------------------------------------------------------|------------------------------------------------|-----------------|
| Product Description                   |                                                          |                                                |                 |
| GF Reinforced, Flame Retardant        |                                                          |                                                |                 |
| General                               |                                                          |                                                |                 |
| Material Status                       | • Commercial: Active                                     |                                                |                 |
| Filler / Reinforcement                | • Glass Fiber, 30% Filler by Weight                      |                                                |                 |
| Features                              | • Flame Retardant                                        | • High Heat Resistance                         | • High Strength |
| Uses                                  | • Automotive Applications<br>• Automotive Exterior Parts | • General Purpose<br>• Industrial Applications |                 |
| Forms                                 | • Pellets                                                |                                                |                 |
| Processing Method                     | • Injection Molding                                      |                                                |                 |
| Part Marking Code (ISO 11469)         | • >PA6-GF30FR<                                           |                                                |                 |
| Revision Date                         | • 9/5/2025                                               |                                                |                 |
| ASTM & ISO Properties                 |                                                          |                                                |                 |
| Physical                              | Nominal Value                                            | Unit                                           | Test Method     |
| Density                               | 1.60                                                     | g/cm³                                          | ISO 1183        |
| Molding Shrinkage <sup>1</sup>        |                                                          |                                                | Internal Method |
| Flow : 2.00 mm                        | 0.20                                                     | %                                              |                 |
| Across Flow : 2.00 mm                 | 0.70                                                     | %                                              |                 |
| Water Absorption (24 hr, 23°C)        | 0.60                                                     | %                                              | Internal Method |
| Mechanical                            | Nominal Value                                            | Unit                                           | Test Method     |
| Tensile Strength                      | 160                                                      | MPa                                            | ISO 527         |
| Tensile Elongation (Break)            | 2.1                                                      | %                                              | ISO 527         |
| Flexural Modulus                      | 11500                                                    | MPa                                            | ISO 178         |
| Flexural Strength                     | 260                                                      | MPa                                            | ISO 178         |
| Impact                                | Nominal Value                                            | Unit                                           | Test Method     |
| Charpy Notched Impact Strength (23°C) | 13                                                       | kJ/m²                                          | ISO 179         |
| Thermal                               | Nominal Value                                            | Unit                                           | Test Method     |
| Deflection Temperature Under Load     |                                                          |                                                |                 |
| 0.45 MPa, Unannealed                  | 215                                                      | °C                                             | ISO 75-2/B      |
| 1.8 MPa, Unannealed                   | 205                                                      | °C                                             | ISO 75-2/A      |
| Electrical                            | Nominal Value                                            | Unit                                           | Test Method     |
| Volume Resistivity                    | 1.0E+15                                                  | ohms·cm                                        | IEC 60250       |
| Processing Information                |                                                          |                                                |                 |
| Injection                             |                                                          | Unit                                           |                 |
| Drying Temperature                    | 100 to 120                                               | °C                                             |                 |
| Drying Time                           | 3.0 to 5.0                                               | hr                                             |                 |
| Middle Temperature                    | 250 to 270                                               | °C                                             |                 |
| Front Temperature                     | 250 to 270                                               | °C                                             |                 |
| Nozzle Temperature                    | 250 to 270                                               | °C                                             |                 |
| Mold Temperature                      | 70 to 90                                                 | °C                                             |                 |

