

NOVADURAN 5010GN6-15TS

PBT-GF15

Mitsubishi Engineering-Plastics Corporation

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|-----------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 40 | cm ³ /10min | ISO 1133 |
| Temperature | 250 | °C | - |
| Load | 5 | kg | - |
| Molding shrinkage, parallel | 0.7 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.3 | % | ISO 294-4, 2577 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Stress at break | 100 | MPa | ISO 527 |
| Strain at break | 3 | % | ISO 527 |
| Flexural modulus, 23°C | 5900 | MPa | ISO 178 |
| Flexural strength | 155 | MPa | ISO 178 |
| Charpy impact strength, +23°C | 38 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 7 | kJ/m ² | ISO 179/1eA |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|-------|-----------------|
| ISO Data | | | |
| Melting temperature, 10°C/min | 224 | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | 195 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 215 | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 30 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 120 | E-6/K | ISO 11359-1/-2 |
| Burning behav. at thickness h | V-0 | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | - |
| Yellow Card available | yes | - | - |

| Electrical properties | Value | Unit | Test Standard |
|-----------------------------|-------|-------|---------------|
| ISO Data | | | |
| Relative permittivity, 1MHz | 3.7 | - | IEC 62631-2-1 |
| Dissipation factor, 1MHz | 170 | E-4 | IEC 62631-2-1 |
| Volume resistivity | 3E13 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | 2E16 | Ohm | IEC 62631-3-2 |
| Electric strength | 23 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 325 | - | IEC 60112 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------|-------------------|----------------|
| Water absorption | 0.07 | % | Sim. to ISO 62 |
| Density | 1520 | kg/m ³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 120 | °C | - |
| Pre-drying - Time | 5 - 8 | h | - |
| Mold temperature | 60 - 100 | °C | - |
| Zone 1 | 250 - 270 | °C | - |
| Zone 2 | 250 - 270 | °C | - |
| Zone 3 | 250 - 270 | °C | - |
| Nozzle temperature | 270 | °C | - |
| Screw speed | 80 - 150 | rpm | - |
| Injection pressure | 20 - 150 | MPa | - |

Characteristics**Processing**

Injection Molding

Applications

Automotive, Electrical and Electronical, General Purpose

Special Characteristics

Flame retardant

Chemical Resistance

Hydrolytically Stable

Regional Availability

North America, Europe, Asia Pacific