

**NOVADURAN 5010G30**

PBT-GF30

Mitsubishi Engineering-Plastics Corporation

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	<b>40</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>250</b>	°C	-
Load	<b>5</b>	kg	-
Molding shrinkage, parallel	<b>0.4</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>1.2</b>	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	<b>9500</b>	MPa	ISO 527
Stress at break	<b>140</b>	MPa	ISO 527
Strain at break	<b>3</b>	%	ISO 527
Flexural modulus, 23°C	<b>9000</b>	MPa	ISO 178
Flexural strength	<b>215</b>	MPa	ISO 178
Charpy impact strength, +23°C	<b>59</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>10</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	<b>224</b>	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	<b>207</b>	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	<b>220</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	<b>18</b>	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	<b>110</b>	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
Burning behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 1MHz	<b>3.4</b>	-	IEC 62631-2-1
Dissipation factor, 1MHz	<b>160</b>	E-4	IEC 62631-2-1
Volume resistivity	<b>2E14</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>5E16</b>	Ohm	IEC 62631-3-2
Electric strength	<b>27</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>500</b>	-	IEC 60112
<b>Other properties</b>			
Water absorption	<b>0.07</b>	%	Sim. to ISO 62
Density	<b>1530</b>	kg/m <sup>3</sup>	ISO 1183
<b>Processing Recommendation Injection Molding</b>			
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>5 - 8</b>	h	-
Mold temperature	<b>80 - 100</b>	°C	-
Zone 1	<b>240</b>	°C	-
Zone 2	<b>245</b>	°C	-
Zone 3	<b>255</b>	°C	-
Nozzle temperature	<b>255</b>	°C	-
Screw speed	<b>80 - 120</b>	rpm	-
Injection pressure	<b>20 - 150</b>	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Applications**

Automotive, Electrical and Electronical, General Purpose

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa