

NOVADURAN 5010G30TZ

PBT-GF30

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	8	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	8700	MPa	ISO 527
Stress at break	115	MPa	ISO 527
Strain at break	4	%	ISO 527
Flexural modulus, 23°C	8000	MPa	ISO 178
Flexural strength	180	MPa	ISO 178
Charpy impact strength, +23°C	64	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	12	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data			
Melting temperature, 10°C/min	224	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	178	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	208	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	21	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	130	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
Electrical properties			
ISO Data			
Relative permittivity, 1MHz	3.4	-	IEC 62631-2-1
Dissipation factor, 1MHz	160	E-4	IEC 62631-2-1
Volume resistivity	3E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E15	Ohm	IEC 62631-3-2
Electric strength	27	kV/mm	IEC 60243-1
Comparative tracking index	500	-	IEC 60112
Other properties			
Water absorption	0.08	%	Sim. to ISO 62
Density	1500	kg/m ³	ISO 1183
Processing Recommendation Injection Molding			
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 - 120	rpm	-
Injection pressure	20 - 150	MPa	-

Characteristics

Processing

Injection Molding

Features

Thermal Stability

Chemical Resistance

Hydrolytically Stable

Applications

Automotive, Electrical and Electronical, General Purpose

Regional Availability

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