

NOVADURAN 5010GT15 X

PBT-GF15

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4100	MPa	ISO 527
Stress at break	85	MPa	ISO 527
Strain at break	5	%	ISO 527
Flexural modulus, 23°C	4000	MPa	ISO 178
Flexural strength	130	MPa	ISO 178
Charpy impact strength, +23°C	69	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	12	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	175	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	206	°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	140	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	-	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.2	-	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	4E13	Ohm*m	IEC 62631-3-1
Surface resistivity	3E15	Ohm	IEC 62631-3-2
Electric strength	24	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Water absorption	0.09	%	Sim. to ISO 62
Density	1390	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	80 - 100	°C	-
Zone 1	240	°C	-
Zone 2	245	°C	-
Zone 3	255	°C	-
Nozzle temperature	255	°C	-
Screw speed	80 - 120	rpm	-
Injection pressure	20 - 150	MPa	-

Characteristics**Processing**

Injection Molding

Applications

Automotive, Electrical and Electronical, General Purpose

Features

Thermal Stability

Chemical Resistance

Hydrolytically Stable

Regional Availability

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