

NOVADURAN 5010N6 2

PBT

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577
Mechanical properties			
ISO Data	Value	Unit	Test Standard
Tensile Modulus	2800	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	4.3	%	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus, 23°C	2600	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Charpy impact strength, +23°C	120	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	3	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data	Value	Unit	Test Standard
Melting temperature, 10°C/min	224	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	77	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	165	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	120	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.6	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.7	mm	-
Yellow Card available	yes	-	-
Electrical properties			
ISO Data	Value	Unit	Test Standard
Relative permittivity, 1MHz	3.2	-	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	1E14	Ohm*m	IEC 62631-3-1
Surface resistivity	1E15	Ohm	IEC 62631-3-2
Electric strength	21	kV/mm	IEC 60243-1
Comparative tracking index	500	-	IEC 60112
Other properties			
Value	Unit	Test Standard	
Water absorption	0.08	%	Sim. to ISO 62
Density	1430	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	240 - 260	°C	-
Zone 2	240 - 260	°C	-
Zone 3	240 - 260	°C	-
Nozzle temperature	260	°C	-
Screw speed	80 - 120	rpm	-
Injection pressure	20 - 150	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

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