NOVADURAN 5010R8 M

PBT | Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**31**	cm³/10min	ISO 1133
Temperature	**250**	°C	-
Load	**2.16**	kg	-
Molding shrinkage, parallel	**2.0**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.9**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**1550**	MPa	ISO 527
Yield stress	**45**	MPa	ISO 527
Yield strain	**11**	%	ISO 527
Strain at break	**200**	%	ISO 527
Flexural modulus, 23°C	**1650**	MPa	ISO 178
Flexural strength	**56**	MPa	ISO 178
Charpy impact strength, +23°C	**200**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**6**	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**222**	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**70**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**155**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**140**	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	**1.6**	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	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.4**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**250**	E-4	IEC 62631-2-1
Volume resistivity	**1E14**	Ohm*m	IEC 62631-3-1
Surface resistivity	**4E15**	Ohm	IEC 62631-3-2
Electric strength	**23**	kV/mm	IEC 60243-1
Comparative tracking index	**600**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**0.09**	%	Sim. to ISO 62
Density	**1300**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**5 - 8**	h	-
Mold temperature	**60 - 80**	°C	-
Zone 1	**235**	°C	-
Zone 2	**240**	°C	-
Zone 3	**250**	°C	-
Nozzle temperature	**245**	°C	-
Screw speed	**80 - 150**	rpm	-
Injection pressure	**20 - 150**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified

Features
Copolymer, Impact Copolymer

Applications
Automotive, Electrical and Electronical, General Purpose

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