Toraycon™ 1201G-15
PBT

TECHNICAL DATA

Product Description

Standard, GF15%

Uses	• Automotive Applications • Automotive Electronics • Bathroom Accessories	• Connectors • Connectors • Electrical/Electronic Applications	• Gears • Toilet Seats
Processing Method	• Injection Molding		
ISO Designation	• >PBT-GF15<		
Type	• PBT/Reinforced		

ASTM & ISO Properties

Physical	**Nominal Value**	**Unit**	**Test Method**
Density (23°C)	1.42	g/cm³	ISO 1183
Molding Shrinkage [1]			Internal Method
Across Flow : 3.00 mm	1.50	%	
Flow : 3.00 mm	0.60	%	
Water Absorption [2] (24 hr, 23°C)	0.070	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	5900	MPa	ISO 527-1
Tensile Strength (23°C)	100	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	4.0	%	ISO 527-2
Flexural Modulus (23°C)	5600	MPa	ISO 178
Flexural Stress (23°C)	170	MPa	ISO 178
Coefficient of Friction - vs. Metal [3]	0.15		Suzuki Method
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	5.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	35.0	kJ/m²	ISO 179
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale, 23°C)	90		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	220	°C	ISO 75-2/B
1.8 MPa, Unannealed	200	°C	ISO 75-2/A
Coefficient of Linear Thermal Expansion (-30 to 100°C)	5.4	cm^-5/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	4.2E+14	ohms·m	IEC 60093
Electric Strength	20	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
23°C, 50 Hz	3.3		
23°C, 1 MHz	3.4		
Dissipation Factor			IEC 60250
23°C, 50 Hz	0.002		
23°C, 1 MHz	0.020		
Arc Resistance	129	sec	IEC 60950
Comparative Tracking Index (CTI)	PLC 2		UL 746A
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.8 mm)	HB		UL 94

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Additional Information	Nominal Value	Unit	Test Method
Bar Flow Length [4] (250°C, 1.00 mm)	80	mm	Internal Method

Notes

[1] 80x80x3mm

[2] in water

[3] Without Lubrication

[4] 93MPa

Toray Industries, Inc.