

Toraycon™ 1101G-30 PBT

TECHNICAL DATA

Product Description

Standard, GF30%

Uses

- Automotive Applications
- Automotive Electronics
- Bathroom Accessories
- Cell Phones
- Connectors
- Construction Applications
- Electrical/Electronic Applications
- Fasteners
- Kitchenware
- Non-specific Food Applications
- Toilet Seats

Processing Method

- Injection Molding

ISO Designation

- >PBT-GF30<

Type

- PBT/Reinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.54	g/cm ³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	1.00	%	
Flow : 3.00 mm	0.30	%	
Water Absorption ² (24 hr, 23°C)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	10200	MPa	ISO 527-1
Tensile Strength (23°C)	145	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	%	ISO 527-2
Flexural Modulus (23°C)	9600	MPa	ISO 178
Flexural Stress (23°C)	220	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)	10.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	45.0	kJ/m ²	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	213	°C	ISO 75-2/A
Coefficient of Linear Thermal Expansion (-30 to 100°C)	4.1	cm ³ -5/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	5.0E+14	ohms·m	IEC 60093
Electric Strength	36	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
23°C, 50 Hz	3.7		
23°C, 1 MHz	4.2		
Dissipation Factor			IEC 60250
23°C, 50 Hz	0.002		
23°C, 1 MHz	0.020		
Arc Resistance	120	sec	IEC 60950
Comparative Tracking Index (CTI)	PLC 2		UL 746A



Flammability

Flame Rating (0.71 mm)

Nominal Value

HB

Unit

Test Method

UL 94

Additional Information

Bar Flow Length ⁴ (250°C, 1.00 mm)

Nominal Value

96

Unit

mm

Test Method

Internal Method

Notes

¹ 80x80x3mm

² in water

³ Without Lubrication

⁴ 93MPa

Toray Industries, Inc.

