

Toraycon™ 7164G-30

PBT

TECHNICAL DATA

Product Description

Low warpage, Heat cycle resistance, V-0, GF30%

Uses

- Automotive Applications
- Automotive Electronics
- Electrical Housing
- Kitchenware

Processing Method

- Injection Molding

ISO Designation

- >PBT-I-GF30FR(17)<

Type

- PBT/Flame retardant reinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.61	g/cm ³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	0.70	%	
Flow : 3.00 mm	0.20	%	
Water Absorption ² (24 hr, 23°C)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	9300	MPa	ISO 527-1
Tensile Strength (23°C)	130	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.0	%	ISO 527-2
Flexural Modulus (23°C)	9000	MPa	ISO 178
Flexural Stress (23°C)	200	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)	8.5	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	60.0	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale, 23°C)	85		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)	4	cm [^] -5/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.1E+15	ohms·m	IEC 60093
Electric Strength	14	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
23°C, 50 Hz	4.0		
23°C, 1 MHz	3.8		
Dissipation Factor			IEC 60250
23°C, 50 Hz	0.001		
23°C, 1 MHz	0.020		
Arc Resistance	134	sec	IEC 60950
Comparative Tracking Index (CTI)	PLC 3		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	V-0		UL 94



Additional Information	Nominal Value	Unit	Test Method
Bar Flow Length ⁴ (250°C, 1.00 mm)	136	mm	Internal Method

Notes

¹ 80x80x3mm
² in water
³ Without Lubrication
⁴ 93MPa

Toray Industries, Inc.

