

Torayca™ TLP1040

Toray Industries, Inc. - Polyamide 6

General Information

Product Description

CF20%

General

Filler / Reinforcement	• Long Carbon Fiber, 20% Filler by Weight
Features	• Antistatic • High Strength • Chemical Resistant • Thermally Conductive
Uses	• Sporting Goods
Processing Method	• Injection Molding
ISO Designation	• >PA6-CF20<

Properties¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.22	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.118 in	0.30	%	
Flow : 0.118 in	0.10	%	
Water Absorption ³ (Saturation, 73°F)	2.8	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	38400	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.0	%	ISO 527-2
Flexural Modulus (73°F)	2.10E+6	psi	ISO 178
Flexural Stress (73°F)	52200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.5	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	428	°F	
Melting Temperature	437	°F	DSC
CLTE - Flow	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	8.3E-6	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0	ohms·cm	JIS K7194
Surface Resistivity	1.0	ohms/cm ²	JIS K7194
Flammability	Nominal Value	Unit	Test Method
Flame Rating ⁴ (Equivalent)	HB		Internal Method

Notes

¹ Typical properties: these are not to be construed as specifications.

² 80x80x3mm

³ 50% RH

⁴ UL94