

Amilan™ CM1003G-30 Nylon 6

TECHNICAL DATA

Product Description

GF30%

Uses

- Appliance Components
- Automotive Applications
- Automotive Electronics
- Camera Applications
- Cell Phones
- Communication Applications
- Computer Components
- Construction Applications
- Displays
- Electrical/Electronic Applications
- Gears
- Office Automation Equipment
- Printer
- Pulleys
- Video Equipment
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PA6-(GF+XD)34<

Type

- Nylon6/Abrasion resistance

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.37	g/cm ³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	0.50 to 0.80	%	
Flow : 3.00 mm	0.20 to 0.40	%	
Water Absorption ²			ISO 62
24 hr, 23°C	1.1	%	
Saturation, 23°C	6.4	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (23°C)	160	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	%	ISO 527-2
Flexural Modulus (23°C)	9000	MPa	ISO 178
Flexural Stress (23°C)	230	MPa	ISO 178
Taber Abrasion Resistance (1000 Cycles)	24	mg	ISO 9352
Coefficient of Friction - vs. Metal ³	0.20		Suzuki Method
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	12.0	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C)	120		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	224	°C	ISO 75-2/B
1.8 MPa, Unannealed	215	°C	ISO 75-2/A
Melting Temperature	225	°C	DSC
Coefficient of Linear Thermal Expansion	2 to 3	cm ³ -5/cm/°C	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating ⁴ (Equivalent)	HB		Internal Method

Toray Industries, Inc.

