Amilan™ CM3511G-50
Nylon Copolymer

TECHNICAL DATA

Product Description

Good appearance, High flow, GF50%

Uses	• Gears	• Power/Other Tools	• Structural Parts
Processing Method	• Injection Molding		
ISO Designation	• >PA-GF50<		
Type	• Co-polymer Nylon/Reinforced		

ASTM & ISO Properties

Physical	**Nominal Value**	**Unit**	**Test Method**
Density (23°C)	1.59	g/cm³	ISO 1183
Molding Shrinkage [1]			Internal Method
Across Flow : 3.00 mm	0.50 to 0.70	%	
Flow : 3.00 mm	0.20 to 0.40	%	
Water Absorption [2] (24 hr, 23°C)	0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (23°C)	210	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.2	%	ISO 527-2
Flexural Modulus (23°C)	14500	MPa	ISO 178
Flexural Stress (23°C)	320	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	28.2	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/B
0.45 MPa, Unannealed	215	°C	
Melting Temperature	216	°C	DSC
Specific Heat	1500	J/kg/°C	
Thermal Conductivity	0.40	W/m/K	
Coefficient of Linear Thermal Expansion	2 to 3	cm^-5/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+10 to 1.0E+11	ohms·m	IEC 60093
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.8 mm)	HB		UL 94

Notes

[1] 80x80x3mm

[2] in water

Toray Industries, Inc.