

## Basic physical properties

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**CM3001G-30**

**Injection Grade / Reinforced Nylon66**

Property	Test Method	ISO	Units	CM3001G-30		
				dry	1.5% water	
Physical property	Glass Fiber Contents		-	wt%	30	
	Specific Gravity		1138	kg/m <sup>3</sup>	1370	
	Water Absorption	24hrs, in 23 °C water	62	%	0.6	
		23 °C in water			5.5	
Mechanical property	Tensile Yield Strength	-40 °C	527-1,-2	MPa	235	
		23 °C			190	
		80 °C			120	
	Elongation at Break	-40 °C	527-1,-2	%	2.0	
		23 °C			2.5	
		80 °C			5.0	
	Flexural Strength	-40 °C	178	MPa	325	
		23 °C			290	
		80 °C			190	
	Flexural Modulus	-40 °C	178	GPa	11.6	
		23 °C			9.5	
		80 °C			5.8	
	Compressive Strength	-40 °C	604	MPa	250	
		23 °C			180	
		80 °C			110	
	Shear Strength	23 °C	ASTM D732	MPa	95	
	Sharp Impact	V-notched	-40 °C	179	kJ/m <sup>2</sup>	10.0
		V-notched	23 °C			13.0
Unnotched		-40 °C	179	kJ/m <sup>2</sup>	60	
Unnotched		23 °C			65	
Rockwell Hardness	23 °C	2039-2	R, M-scale	R121, M97		
Taper Abrasion			mg/1000time	24		
Coefficient of friction	Vs metal without lubrication		Suzuki Method	-	0.4	
	Vs metal without lubrication				<0.15	
Heat property	Melting Point		DSC Method	°C	265	
	Specific Heat		-	J/g °C	1.8	
	Thermal Conductivity		-	W/m °C	0.40	
	Coef of Linear Thermal Expansion		11359	× 10 <sup>-5</sup> /°C	2~3	
	Heat Deflection Temp.	0.46MPa	75-2	°C	262	
		1.86MPa			255	
Flame Class		UL-94	-	HB(1/32")		
Electrical	Volume Resistivity		IEC 93	Ω·m	10 <sup>13</sup> 10 <sup>10-11</sup>	

ABS Resin  
**TOYOLAC**  
Nylon Resin  
**Amilan™**  
PBT Resin  
**TORAYCON**  
PPS Resin  
**TORELINA**  
LCP Resin  
**SIVERAS**  
Super EP  
**TI Polymer**  
Polyolefin Foam  
**TORAYPEF**

property	Dielectric Strength		IEC 243-1	MV/m	20	17
	Dielectric Constant 23 °C,60%RH	50Hz	IEC 250	-	4.6	6.3
		1KHz			4.4	5.5
		1MHz			3.9	4.0
	Dissipation Factor 23 °C,60%RH	50Hz	IEC 250	-	0.02	0.08
		1KHz			0.02	0.08
		1MHz			0.02	0.04
Arc Resistance Tungsten Electrode			UL-746A	sec.	114	120
Molding property	Mold Shirinkage 3mm Thickness	Horizontal	Toray Method	%	0.2~0.5	-
		Vertical			0.6~0.9	-

Note:These values are typical data for this product under specific test conditions and notintended for use as limiting specifications.

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