

Property	Test Condition	Test Method ISO	Units	Nylon66/Reinforced	
				Standard, GF45%	
				CM3001G-45	
				>PA66-GF30<	
				Dry	1.0%water
Physical property					
Water Absorption	24hrs. in 23℃ water	ISO 62	%	0.4	-
Water Absorption	23℃ in water	ISO 62	%	4.8	-
Density	23℃	ISO 1183	kg/m ³	1500	
Mechanical property					
Tensile strength	-40℃	ISO 527-1,2	MPa	280	250
Tensile strength	23℃	ISO 527-1,2	MPa	220	165
Tensile strength	80℃	ISO 527-1,2	MPa	140	115
Elongation at Break	-40℃	ISO 527-1,2	%	2.5	-
Elongation at Break	23℃	ISO 527-1,2	%	3	-
Elongation at Break	80℃	ISO 527-1,2	%	5.5	-
Flexural Strength	-40℃	ISO 178	MPa	380	350
Flexural Strength	23℃	ISO 178	MPa	345	295
Flexural Strength	80℃	ISO 178	MPa	230	195
Flexural Modulus	-40℃	ISO 178	GPa	15.5	14.4
Flexural Modulus	23℃	ISO 178	GPa	13.8	11
Flexural Modulus	80℃	ISO 178	GPa	8.6	7.3
Compressive Strength	-40℃	ISO 604	MPa	265	-
Compressive Strength	23℃	ISO 604	MPa	195	-
Compressive Strength	80℃	ISO 604	MPa	120	-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	-	-
Shear Strength	23℃	ASTM D732	MPa	105	
Rockwell Hardness	23℃	ISO 2039-2	R Scale	R121,M103	-
Rockwell Hardness	80℃	ISO 2039-2	R Scale	-	-
Taper Abrasion		ISO 9352	mg/1000times	-	-
Charpy Impact Strength (V-notched)	-40℃	ISO 179	kJ/m ²	11.5	12
Charpy Impact Strength (V-notched)	23℃	ISO 179	kJ/m ²	15	16.5
Charpy Impact Strength (Unnotched)	-40℃	ISO 179	kJ/m ²	85	90
Charpy Impact Strength (Unnotched)	23℃	ISO 179	kJ/m ²	90	100
Heat property					
Melting Point		DSC Method	℃	265	-
Specific Heat		-	J/g · ℃	1.5	-
Thermal Conductivity		-	W/m · ℃	0.42	-
Coef of Linear Thermal Expansion		ISO 11359-2	×10 ⁻⁵ /℃	2~3	-
Heat Deflection Temp Low Load	0.45MPa	ISO 75-1,2	℃	263	-
Flammability		UL94	rank/thickness m mt	HB(1/32")	HB(1/32")
Electrical property					
Volume Resistivity		IEC 60093	Ω · m	10 ¹³	10 ¹⁰ ~10 ¹¹
Dielectric Strength		IEC 60243-1	MV/m	19	-
Dielectric Constant	23℃、60% RH、50Hz	IEC 60250	-	4.7	-
Dielectric Constant	23℃、60% RH、1KHz	IEC 60250	-	4.5	-
Dielectric Constant	23℃、60% RH、1MHz	IEC 60250	-	4.1	-
Dissipation Factor	23℃、60% RH、50Hz	IEC 60250	-	0.02	-
Dissipation Factor	23℃、60% RH、1KHz	IEC 60250	-	0.02	-
Dissipation Factor	23℃、60% RH、1MHz	IEC 60250	-	0.02	-
Arc resistance	Tungsten Electrode	UL-746A	sec.	-	-
Molding property					
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%	0.2~0.4	-
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%	0.5~0.8	

These values are typical data for this product under specific test conditions and not intended for use as limiting specifications.

