

Property	Test Condition	Test Method ISO	Units	Nylon66/Reinforced	
				Standard, GF30%	
				CM3001G30	
				>PA66-GF30<	
				Dry	1.5%water
Physical property					
Water Absorption	24hrs. in 23℃ water	ISO62	%	0.6	-
Water Absorption	23℃ in water	ISO62	%	5.5	-
Density	23℃	ISO1183	kg/m ³	1370	
Mechanical property					
Tensile strength	-40℃	ISO527-1,2	MPa	235	215
Tensile strength	23℃	ISO527-1,2	MPa	190	140
Tensile strength	80℃	ISO527-1,2	MPa	120	100
Elongation at Break	-40℃	ISO527-1,2	%	2	2.5
Elongation at Break	23℃	ISO527-1,2	%	2.5	3
Elongation at Break	80℃	ISO527-1,2	%	5	5.5
Flexural Strength	-40℃	ISO178	MPa	325	315
Flexural Strength	23℃	ISO178	MPa	290	215
Flexural Strength	80℃	ISO178	MPa	190	135
Flexural Modulus	-40℃	ISO178	GPa	11.6	10.5
Flexural Modulus	23℃	ISO178	GPa	9.5	6.8
Flexural Modulus	80℃	ISO178	GPa	5.8	4.3
Compressive Strength	-40℃	ISO604	MPa	250	200
Compressive Strength	23℃	ISO604	MPa	180	110
Compressive Strength	80℃	ISO604	MPa	110	70
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	0.15	-
Shear Strength	23℃	ASTM D732	MPa	95	85
Rockwell Hardness	23℃	ISO2039-2	R Scale	R121,M97	-
Rockwell Hardness	80℃	ISO2039-2	R Scale	24	-
Taper Abrasion		ISO9352	mg/1000times	0.4	-
Charpy Impact Strength (V-notched)	-40℃	ISO179	kJ/m ²	10	12
Charpy Impact Strength (V-notched)	23℃	ISO179	kJ/m ²	13	16
Charpy Impact Strength (Unnotched)	-40℃	ISO179	kJ/m ²	60	70
Charpy Impact Strength (Unnotched)	23℃	ISO179	kJ/m ²	65	75
Heat property					
Melting Point		DSC Method	℃	265	-
Specific Heat		-	J/g · ℃	1.8	-
Thermal Conductivity		-	W/m · ℃	0.4	-
Coef of Linear Thermal Expansion		ISO11359-2	×10 ⁻⁵ /℃	2~3	-
Heat Deflection Temp Low Load	0.45MPa	ISO75-1,2	℃	262	-
Flammability		UL94	rank/thickness m mt	HB(1/32")	HB(1/32")
Electrical property					
Volume Resistivity		IEC60093	Ω · m	10 ¹³	10 ¹⁰ ~10 ¹¹
Dielectric Strength		IEC60243-1	MV/m	20	17
Dielectric Constant	23℃、60%RH、50Hz	IEC 60250	-	4.6	6.3
Dielectric Constant	23℃、60%RH、1KHz	IEC 60250	-	4.4	5.5
Dielectric Constant	23℃、60%RH、1MHz	IEC 60250	-	3.9	4
Dissipation Factor	23℃、60%RH、50Hz	IEC 60250	-	0.02	0.08
Dissipation Factor	23℃、60%RH、1KHz	IEC 60250	-	0.02	0.08
Dissipation Factor	23℃、60%RH、1MHz	IEC 60250	-	0.02	0.04
Arc resistance	Tungsten Electrode	UL-746A	sec.	114	120
Molding property					
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%	0.2~0.5	-
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%	0.6~0.9	-

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

