

Property	Test Condition	Test Method ISO	Units	Nylon6/Unreinforced	
				Standard	
				CM1017	
				>PA6<	
				Dry	3.5%water
Physical property					
Water Absorption	24hrs. in 23℃ water	ISO62	%	1.8	-
Water Absorption	23℃ in water	ISO62	%	10.5	-
Density	23℃	ISO1183	kg/m ³	1130	
Mechanical property					
Tensile strength	-40℃	ISO527-1,2	MPa	120	115
Tensile strength	23℃	ISO527-1,2	MPa	85	40
Tensile strength	80℃	ISO527-1,2	MPa	30	20
Elongation atYield	23℃	ISO527-1,2	%	1.5	-
Elongation atBreak	23℃	ISO527-1,2	%	38	50
Flexural Strength	-40℃	ISO178	MPa	145	140
Flexural Strength	23℃	ISO178	MPa	120	45
Flexural Strength	80℃	ISO178	MPa	50	30
Flexural Modulus	-40℃	ISO178	GPa	3.9	3.6
Flexural Modulus	23℃	ISO178	GPa	3	1
Flexural Modulus	80℃	ISO178	GPa	0.8	0.4
Compressive Strength	23℃	ISO604	MPa	85	-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	0.15～0.2	-
Shear Strength	23℃	ASTM D732	MPa	75	70
Rockwell Hardness	23℃	ISO2039-2	R Scale	119	90
Rockwell Hardness	80℃	ISO2039-2	R Scale	83	-
Taper Abrasion		ISO9352	mg/1000times	3～4	-
Charpy Impact Strength (V-notched)	-40℃	ISO179	kJ/m ²	2.5	11.5
Charpy Impact Strength (V-notched)	23℃	ISO179	kJ/m ²	4	31
Charpy Impact Strength (Unnotched)	-40℃	ISO179	kJ/m ²	破断せず	-
Charpy Impact Strength (Unnotched)	23℃	ISO179	kJ/m ²	破断せず	-
Heat property					
Melting Point		DSC Method	℃	225	-
Specific Heat		-	J/g ・ ℃	1.9	-
Thermal Conductivity		-	W/m ・ ℃	0.25	-
Coef of Linear Thermal Expansion		ISO11359-2	×10 ⁻⁵ /℃	8	-
Heat Deflection Temp Low Load	0.45MPa	ISO75-1,2	℃	190	-
Flammability		UL94	rank/thickness m mt	V-2(1/32")	V-2(1/32")
Electrical property					
Volume Resistivity		IEC60093	Ω ・ m	10 ¹² ～10 ¹³	10 ⁹ ～10 ¹⁰
Dielectric Strength		IEC60243-1	MV/m	20	-
Dielectric Constant	23℃、60% RH、50Hz	IEC 60250	-	4.1	9
Dielectric Constant	23℃、60% RH、1KHz	IEC 60250	-	3.9	8
Dielectric Constant	23℃、60% RH、1MHz	IEC 60250	-	3.4	4.5
Dissipation Factor	23℃、60% RH、50Hz	IEC 60250	-	0.07	0.1
Dissipation Factor	23℃、60% RH、1KHz	IEC 60250	-	0.06	0.11
Dissipation Factor	23℃、60% RH、1MHz	IEC 60250	-	0.03	0.13
IEC Tracking Index(CTI)		UL-746B	-	600	-
Arc resistance	Tungsten Electrode	UL-746A	sec.	120	-
Molding property					
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%	1.0～1.6	-
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%		-
Mold shrinkage(Machine Direction)	80×80×1mmt	Toray Method	%	0.5～1.0	

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

