

Property	Test Condition	Test Method ISO	Units	Nylon6/Unreinforced	
				High cycle, Heat stability, Low temperature toughness	
				CM1017XL3	
				>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	110	100
Tensile strength	23℃	ISO527-1,2	MPa	80	35
Tensile strength	80℃	ISO527-1,2	MPa	25	20
Elongation at Yield	23℃	ISO527-1,2	%	1.5	-
Elongation at Break	23℃	ISO527-1,2	%	37.5	50
Flexural Strength	-40℃	ISO178	MPa	135	125
Flexural Strength	23℃	ISO178	MPa	110	40
Flexural Strength	80℃	ISO178	MPa	40	25
Flexural Modulus	-40℃	ISO178	GPa	3.8	3.6
Flexural Modulus	23℃	ISO178	GPa	2.8	0.8
Flexural Modulus	80℃	ISO178	GPa	0.7	0.3
Compressive Strength	23℃	ISO604	MPa	80	-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	0.15～0.2	-
Shear Strength	23℃	ASTM D732	MPa	70	65
Rockwell Hardness	23℃	ISO2039-2	R Scale	119	90
Rockwell Hardness	80℃	ISO2039-2	R Scale	80	-
Taper Abrasion		ISO9352	mg/1000times	3～4	-
Charpy Impact Strength (V-notched)	-40℃	ISO179	kJ/m ²	3.5	-
Charpy Impact Strength (V-notched)	23℃	ISO179	kJ/m ²	5	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	℃	182	-
Flammability		UL94	rank/thickness mmt	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	%	1.2～1.8	-
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%		-
Mold shrinkage(Machine Direction)	80×80×1mmt	Toray Method	%	0.7～1.1	

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

