

Property	Test Condition	Test Method ISO	Units	Nylon6/Unreinforced		Nylon6/Unreinforced		Nylon6/Unreinforced		Nylon6/Unreinforced		Nylon6/Unreinforced	
				High flow		Standard		High cycle, Heat stability, Low temperature toughness		High rigidity		Middle viscosity, Heat stability	
				CM1007		CM1017		CM1017XL3		CM1017K		CM1026	
				>PA6<		>PA6<		>PA6<		>PA6<		>PA6<	
				Dry	3.5%water	Dry	3.5%water	Dry	3.5%water	Dry	3.5%water	Dry	3.5%water
Physical property													
Water Absorption	24hrs. in 23℃ water	ISO62	%	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
Water Absorption	23℃ in water	ISO62	%	10.5	-	10.5	-	10.5	-	10.5	-	10.5	-
Density	23℃	ISO1183	kg/m ³	1130	-	1130	-	1130	-	1130	-	1130	-
Mechanical property													
Tensile strength	-40℃	ISO527-1,2	MPa	110	100	120	115	110	100	-	-	110	100
Tensile strength	23℃	ISO527-1,2	MPa	80	35	85	40	80	35	90	45	80	35
Tensile strength	80℃	ISO527-1,2	MPa	25	20	30	20	25	20	-	-	25	20
Elongation at Yield	23℃	ISO527-1,2	%	2	-	1.5	-	1.5	-	-	-	1.5	-
Elongation at Break	23℃	ISO527-1,2	%	35	50	38	50	37.5	50	25	50	50	50
Flexural Strength	-40℃	ISO178	MPa	135	125	145	140	135	125	-	-	135	125
Flexural Strength	23℃	ISO178	MPa	110	40	120	45	110	40	120	50	110	40
Flexural Strength	80℃	ISO178	MPa	40	25	50	30	40	25	-	-	40	25
Flexural Modulus	-40℃	ISO178	GPa	3.8	3.6	3.9	3.6	3.8	3.6	-	-	3.8	3.6
Flexural Modulus	23℃	ISO178	GPa	2.8	0.8	3	1	2.8	0.8	3.1	1.1	2.6	0.8
Flexural Modulus	80℃	ISO178	GPa	0.7	0.3	0.8	0.4	0.7	0.3	-	-	0.7	0.3
Compressive Strength	23℃	ISO604	MPa	80	-	85	-	80	-	85	-	80	-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	0.15~0.2	-	0.15~0.2	-	0.15~0.2	-	0.15~0.2	-	0.15~0.2	-
Shear Strength	23℃	ASTM D732	MPa	70	65	75	70	70	65	75	70	70	65
Rockwell Hardness	23℃	ISO2039-2	R Scale	119	90	119	90	119	90	119	90	119	90
Rockwell Hardness	80℃	ISO2039-2	R Scale	80	-	83	-	80	-	80	-	80	-
Taper Abrasion		ISO9352	mg/1000times	3~4	-	3~4	-	3~4	-	3~4	-	3~4	-
Charpy Impact Strength (V-notched)	-40℃	ISO179	kJ/m ²	3	-	2.5	11.5	3.5	-	2.5	-	4	-
Charpy Impact Strength (V-notched)	23℃	ISO179	kJ/m ²	5	31	4	31	5	31	3.5	31	6	40
Charpy Impact Strength (Unnotched)	-40℃	ISO179	kJ/m ²	破断せず	-	破断せず	-	破断せず	-	破断せず	-	破断せず	-
Charpy Impact Strength (Unnotched)	23℃	ISO179	kJ/m ²	破断せず	-	破断せず	-	破断せず	-	破断せず	-	破断せず	-
Heat property													
Melting Point		DSC Method	℃	225	-	225	-	225	-	225	-	225	-
Specific Heat		-	J/g · ℃	1.9	-	1.9	-	1.9	-	1.9	-	1.9	-
Thermal Conductivity		-	W/m · ℃	0.25	-	0.25	-	0.25	-	0.25	-	0.25	-
Coef of Linear Thermal Expansion		ISO11359-2	×10 ⁻⁵ /℃	8	-	8	-	8	-	8	-	8	-
Heat Deflection Temp Low Load	0.45MPa	ISO75-1,2	℃	182	-	190	-	182	-	194	-	182	-
Flammability		UL94	rank/thickness mm	V-2(1/32")	V-2(1/32")	V-2(1/32")	V-2(1/32")	V-2(1/32")	V-2(1/32")	V-2(1/16")	V-2(1/16")	HB	HB
Electrical property													
Volume Resistivity		IEC60093	Ω · m	10 ¹² ~10 ¹³	10 ⁹ ~10 ¹⁰	10 ¹² ~10 ¹³	10 ⁹ ~10 ¹⁰	10 ¹² ~10 ¹³	10 ⁹ ~10 ¹⁰	10 ¹² ~10 ¹³	10 ⁹ ~10 ¹⁰	10 ¹¹ ~10 ¹²	10 ⁹ ~10 ¹⁰
Dielectric Strength		IEC60243-1	MV/m	20	-	20	-	20	-	20	-	-	-
Dielectric Constant	23℃、60%RH、50Hz	IEC 60250	-	4.1	9	4.1	9	4.1	9	4.1	9	-	-
Dielectric Constant	23℃、60%RH、1KHz	IEC 60250	-	3.9	8	3.9	8	3.9	8	3.9	8	-	-
Dielectric Constant	23℃、60%RH、1MHz	IEC 60250	-	3.4	4.5	3.4	4.5	3.4	4.5	3.4	4.5	-	-
Dissipation Factor	23℃、60%RH、50Hz	IEC 60250	-	0.07	0.1	0.07	0.1	0.07	0.1	0.07	0.1	-	-
Dissipation Factor	23℃、60%RH、1KHz	IEC 60250	-	0.06	0.11	0.06	0.11	0.06	0.11	0.06	0.11	-	-
Dissipation Factor	23℃、60%RH、1MHz	IEC 60250	-	0.03	0.13	0.03	0.13	0.03	0.13	0.03	0.13	-	-
IEC Tracking Index(CTI)		UL-746B	-	600	-	600	-	600	-	600	-	-	-
Arc resistance	Tungsten Electrode	UL-746A	sec.	120	-	120	-	120	-	120	-	-	-
Molding property													
Mold shrinkage(Machine Direction)	80×80×3mm	Toray Method	%	1.0~1.6	-	1.0~1.6	-	1.2~1.8	-	1.0~1.6	-	0.8~1.6	-
Mold shrinkage(Transverse Direction)	80×80×3mm	Toray Method	%		-		-		-		-		-
Mold shrinkage(Machine Direction)	80×80×1mm	Toray Method	%	0.5~1.0		0.5~1.0		0.7~1.1		0.5~1.0		0.4~0.9	

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