

Property	Test Condition	Test Method ISO	Units	Nylon6/Reinforced	
				Low warpage, Mineral filler reinforced	
				CM1001R	
				>PA6-MD40<	
				Dry	2.1%water
Physical property					
Water Absorption	24hrs. in 23℃ water	ISO 62	%	0.9	-
Water Absorption	23℃ in water	ISO 62	%	5.8	-
Density	23℃	ISO 1183	kg/m ³	1510	
Mechanical property					
Tensile strength	-40℃	ISO 527-1,2	MPa	130	-
Tensile strength	23℃	ISO 527-1,2	MPa	95	55
Tensile strength	80℃	ISO 527-1,2	MPa	40	-
Elongation at Break	-40℃	ISO 527-1,2	%	2	-
Elongation at Break	23℃	ISO 527-1,2	%	2.5	2.5
Elongation at Break	80℃	ISO 527-1,2	%	7	-
Flexural Strength	-40℃	ISO 178	MPa	160	-
Flexural Strength	23℃	ISO 178	MPa	145	70
Flexural Strength	80℃	ISO 178	MPa	60	-
Flexural Modulus	-40℃	ISO 178	GPa	6.9	-
Flexural Modulus	23℃	ISO 178	GPa	5.8	2.3
Flexural Modulus	80℃	ISO 178	GPa	1.8	-
Compressive Strength	-40℃	ISO 604	MPa	-	-
Compressive Strength	23℃	ISO 604	MPa	-	-
Compressive Strength	80℃	ISO 604	MPa	-	-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-	0.15	-
Shear Strength	23℃	ASTM D732	MPa	73	62
Rockwell Hardness	23℃	ISO 2039-2	R Scale	R119,M81	-
Rockwell Hardness	80℃	ISO 2039-2	R Scale	25~30	-
Taper Abrasion		ISO 9352	mg/1000times	0.4	-
Charpy Impact Strength (V-notched)	-40℃	ISO 179	kJ/m ²	-	-
Charpy Impact Strength (V-notched)	23℃	ISO 179	kJ/m ²	5	7
Charpy Impact Strength (Unnotched)	-40℃	ISO 179	kJ/m ²	35	-
Charpy Impact Strength (Unnotched)	23℃	ISO 179	kJ/m ²	45	-
Heat property					
Melting Point		DSC Method	℃	225	-
Specific Heat		-	J/g · ℃	-	
Thermal Conductivity		-	W/m · ℃	-	-
Coef of Linear Thermal Expansion		ISO 11359-2	×10 ⁻⁵ /℃	8	-
Heat Deflection Temp Low Load	0.45MPa	ISO 75-1,2	℃	203	-
Flammability		UL94	rank/thickness mmt	HB(1/32")	HB(1/32")
Electrical property					
Volume Resistivity		IEC 60093	Ω · m	10 ¹³	10 ¹⁰
Dielectric Strength		IEC 60243-1	MV/m	21	-
Dielectric Constant	23℃、60% RH、50Hz	IEC 60250	-	4.6	-
Dielectric Constant	23℃、60% RH、1KHz	IEC 60250	-	4.5	-
Dielectric Constant	23℃、60% RH、1MHz	IEC 60250	-	3.8	-
Dissipation Factor	23℃、60% RH、50Hz	IEC 60250	-	0.04	-
Dissipation Factor	23℃、60% RH、1KHz	IEC 60250	-	0.03	-
Dissipation Factor	23℃、60% RH、1MHz	IEC 60250	-	0.02	-
Arc resistance	Tungsten Electrode	UL-746A	sec.	137	-
Molding property					
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%	0.8~1.0	-
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%	0.8~1.0	

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

