

Property	Test Condition	Test Method ISO	Units	GF reinforced
				GF40%、UL746C (f1)
				AR04
				>PPS-GF40<
Physical property				
Water Absorption	24hrs. in 23℃ water	ISO 62	%	0.02
Density	23℃	ISO 1183	kg/m ³	1680
Color				Natural/Black
Mechanical property				
Tensile strength	23℃	ISO 527-1,2	MPa	180
Elongation at Break	23℃	ISO 527-1,2	%	1.5
Flexural Strength	23℃	ISO 178	MPa	270
Flexural Modulus	23℃	ISO 178	GPa	15.5
Coefficient of friction	Vs metal	-	-	0.25
Shear Strength	23℃	JIS K 7214	MPa	70
Rockwell Hardness		ISO 2039-2	R Scale	122
Taper Abrasion		ISO 9352	mg/1000times	50
Charpy Impact Strength (V-notched)	23℃	ISO 179	kJ/m ²	11
Charpy Impact Strength (Unnotched)	23℃	ISO 179	kJ/m ²	35
Heat property				
Melting Point		ISO 11357-3	℃	278
Coef of Linear Thermal Expansion	Machine Direction	ISO 11359-2	×10 ⁻⁵ /K	2.3
Coef of Linear Thermal Expansion	Transverse Direction	ISO 11359-2	×10 ⁻⁵ /K	3.1
Heat Deflection Temp High Load	1.80MPa	ISO 75-1,2	℃	260
Flammability		UL94	rank/thickness m mt	V-0 (NC ; 0.38mmt) (BK ; 0.71m mt)
Electrical property				
Volume Resistivity		IEC 60093	Ω · m	10 ¹⁴
Dielectric Strength		IEC 60243-1	MV/m	24
Dielectric Constant	23℃、60% RH、1MHz	IEC 60250	-	3.6
Dissipation Factor	23℃、60% RH、1MHz	IEC 60250	-	0.002
Molding property				
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%	0.2
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%	0.8
Bar Flow	320℃,98MPa,1mmt	Toray Method	×10 ⁻³ m	150

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

