



	Grade	HN-3104
	Resin Type	PC/GF

E&E, Flame retardant

Item	Measuring Method	Condition	Unit	Value
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Physical

Specific Gravity	ISO 1183	Natural or representative	-	1.28
Melt Flow Index	ISO 1133	250°C, 10kg	g/10min	12.5
Melt Flow Index	ISO 1133	300°C, 1.2kg	g/10min	9
Mold Shrinkage(MD)	ISO 294-4	Flow at 2mm(MD)	%	0.3-0.6
Mold Shrinkage(TD)	ISO 294-4	X-Flow at 2mm(TD)	%	0.3-0.6
ASH content	ISO 3451	-	%	10.5

Mechanical

Tensile Strength at Yield	ISO 527	5mm/min	MPa	60
Tensile Strain at break	ISO 527	5mm/min	%	6
Tensile Modulus	ISO 527	5mm/min	MPa	3500
Tensile Strength at Break	ISO 527	5mm/min	MPa	60
Flexural Strength	ISO 178	2mm/min	MPa	90
Flexural Modulus	ISO 178	2mm/min	MPa	3500
Izod Impact Strength (notched)	ISO 180 1A	at 23°C, 4mm	kJ/m ²	10
Charpy Impact Strength (V-notched)	ISO 179 1eA	at 23°C, 4mm	kJ/m ²	10
Rockwell Hardness	ISO 2039-2	R-scale	-	115

Thermal properties

Heat Deflection Temperature(Unannealed)	ISO 75-2	1.8MPa, 4.0mm	°C	137
Heat Deflection Temperature(Unannealed)	ISO 75-2	0.45MPa, 4.0mm	°C	143
VICAT Softening Temperature	ISO 306	B/50	°C	142

Flame-retarded				
Flammability	UL94	HB	mm	0.75
Flammability	UL94	V-1	mm	1.2
Flammability	UL94	V-0	mm	1.5, 2.5, 3.0
Flammability	UL94	5VA	mm	3.0
Flammability	UL94	5VB	mm	2.5
Glow-Wire Flammability Index	IEC 60695-2-12	1.5mm, 3.0mm	°C	960
Electric				
Comparative Tracking Index	IEC 60112	-	PLC	3

1. The above figures are the representative values based on NP, which may vary from color to color, and can be used as a reference only for the purpose of selecting materials.
2. The above figures are basic guidelines for selecting materials; therefore, they are not regarded as the official specifications for materials involved, and cannot be used for the purpose of designing a mold.
3. The above values can be adjusted in accordance with processing conditions, and the specific change in value is allowed only within a limited range in which adjustment has no adverse or negative impact on the final product.

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