

	Grade	TP-1020U
	Resin Type	PC

Item	Measuring Method	Condition	Unit	Value
Physical				
Specific Gravity	ISO 1183	Natural or representative	-	1.19
Melt Flow Index	ISO 1133	300°C, 1.2kg	g/10min	20
Mold Shrinkage(MD)	ISO 294-4	Flow at 2mm(MD)	%	0.4-0.7
Mold Shrinkage(TD)	ISO 294-4	X-Flow at 2mm(TD)	%	0.4-0.7
Mechanical				
Tensile Strength at Yield	ISO 527	5mm/min	MPa	57
Tensile Strain at break	ISO 527	5mm/min	%	120
Tensile Modulus	ISO 527	5mm/min	MPa	2100
Tensile Strength at Break	ISO 527	5mm/min	MPa	64
Flexural Strength	ISO 178	2mm/min	MPa	90
Flexural Modulus	ISO 178	2mm/min	MPa	2130
Izod Impact Strength (notched)	ISO 180 1A	at 23°C, 4mm	kJ/m ²	52
Charpy Impact Strength (V-notched)	ISO 179 1eA	at 23°C, 4mm	kJ/m ²	64
Rockwell Hardness	ISO 2039-2	R-scale	-	122
Thermal properties				
Heat Deflection Temperature(Unannealed)	ISO 75-2	1.8MPa, 4.0mm	°C	123
Heat Deflection Temperature(Unannealed)	ISO 75-2	0.45MPa, 4.0mm	°C	139
VICAT Softening Temperature	ISO 306	B/50	°C	147

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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* The last update date
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