

ASTM Property

starex [®]	Grade	GR-4017
	Resin Type	ABS/GF

Automotive

Item	Measuring Method	Condition	Unit	Value
Physical				
Specific Gravity	ASTM D792	Natural or representative color	-	1.17
Melt Flow Index	ASTM D1238	220°C, 10kg	g/10min	17.2
Mold Shrinkage(MD)	ASTM D955	Flow at 3.2mm(MD)	%	0.2-0.4
Mold Shrinkage(TD)	ASTM D955	X-Flow at 3.2mm(TD)	%	-
Mechanical				
Tensile Strength at Yield	ASTM D638	5mm/min	kgf/cm ²	780
Tensile Strain at break	ASTM D638	5mm/min	%	-
Tensile Modulus	ASTM D638	5mm/min	kgf/cm ²	-
Tensile Strength at break	ASTM D638	5mm/min	kgf/cm ²	-
Flexural Strength	ASTM D790	2.8mm/min	kgf/cm ²	1180
Flexural Modulus	ASTM D790	2.8mm/min	kgf/cm ²	51000
Izod Impact Strength(notched)	ASTM D256	1/8 inch at 23°C	kgf-cm/cm	8
Rockwell Hardness	ASTM D785	R-Scale	-	117
Thermal				
Heat Deflection Temperature	ASTM D648	18.56kgf/cm ² , 6.4mm	°C	100
Heat Deflection Temperature	ASTM D648	4.6kgf/cm ² , 6.4mm	°C	-
VICAT Softening Temperature	ISO 306	B/50	°C	105

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 : 01/27/2016