

## ISO Property

starex®	Grade	WR-9120
	Resin Type	ASA

### Building & Construction

Item	Measuring Method	Condition	Unit	Value
Physical				
Specific Gravity	ISO 1183	Natural or representative color	-	1.06
Melt Flow Index	ISO 1133	220°C, 10kg	g/10min	17
Mold Shrinkage(MD)	ISO 294-4	Flow at 2mm(MD)	%	0.40~0.49
Mold Shrinkage(TD)	ISO 294-4	X-Flow at 2mm(TD)	%	0.42~0.52
Mechanical				
Tensile Strength at Yield	ISO 527	50mm/min	MPa	47
Tensile Strain at break	ISO 527	50mm/min	%	18
Tensile Modulus	ISO 527	50mm/min	MPa	2200
Tensile Strength at break	ISO 527	50mm/min	MPa	34
Flexural Strength	ISO 178	2mm/min	MPa	67
Flexural Modulus	ISO 178	2mm/min	MPa	2100
Izod Impact Strength(notched)	ISO 180 1A	at 23°C, 4mm	KJ/m2	11
Charpy Impact Strength(V-notched)	ISO 180 1A	at 23°C, 4mm	KJ/m2	16
Rockwell Hardness	ISO 2039-2	R-Scale	-	106
Thermal				
Heat Deflection Temperature(Unannealed)	ISO 75-2	1.8MPa, 4.0mm	°C	72
Heat Deflection Temperature(Unannealed)	ISO 75-2	0.45MPa, 4.0mm	°C	90
Heat Deflection Temperature(Annealing)	ISO 75-2	1.8MPa, 4.0mm	°C	95
Heat Deflection Temperature(Annealing)	ISO 75-2	0.45MPa, 4.0mm	°C	99
VICAT Softening Temperature	ISO 306	B/50	°C	98
Flammability				
Flammability	UL94	HB	mm	1.5

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1. The value above is the representative value of the NP or representative color and may have deviation. It can only be used for selecting materials.
2. The value above shall not be regarded as a material specification and cannot be used for molding designs.

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