

# performanceplastics

## Toyolac 700 314 Impact Grade GP ABS

### Properties

Physical	Method	Condition	Unit	Value
Melt Index	ISO 1133	220°C/10kg	g/10min	25
Water Absorption	ASTM D570	23°C x 24 hours	%	0.3
Specific Gravity	ASTM D792	23°C	–	1.05
Mold Shrinkage	ASTM D955	–	%	0.4~0.6
Mechanical	Method	Condition	Unit	Value
Tensile Stress at Yield	ASTM D638	5mm/min	MPa	49
Tensile Strain at break	ASTM D638	5mm/min	%	35
Flexural Strength	ASTM D790	3mm/min	MPa	76
Flexural Modulus	ASTM D790	3mm/min	MPa	2,450
IZOD Impact strength, notched	ASTM D256	12.7 x 62.5 x 12.7mm,(23°C)	J/m	196
	ASTM D256	12.7 x 62.5 x 12.7mm,(0°C)	J/m	108
	ASTM D256	12.7 x 62.5 x 12.7mm,(-30°C)	J/m	80
	ASTM D256	12.7 x 62.5 x 3.2mm,(23°C)	J/m	212
	ASTM D256	12.7 x 62.5 x 3.2mm,(0°C)	J/m	157
	ASTM D256	12.7 x 62.5 x 3.2mm,(-30°C)	J/m	118
Rockwell Hardness	ASTM D785	R-Scale	–	116
Electrical	Method	Condition	Unit	Value
Specific surface resistivity	ASTM D257	23°C	ohm	>10 <sup>16</sup>
Specific volume resistivity	ASTM D527	23°C	ohm.cm	>10 <sup>16</sup>
Dielectric strength	ASTM D149	Short time	KV/mm	23
Dielectric constant	ASTM D150	1000Hz	–	3.1
Power factor	ASTM D150	1000Hz	–	6.1 x 10 <sup>-3</sup>
Thermal	Method	Condition	Unit	Value
Heat Deflection Temp	ASTM D648	12.7mm,1.82	°C	92
	ASTM D648	6.4mm,1.82	°C	87
Thermal Conductivity	ASTM C177		W/K.m	0.15
Coefficient of LTE	ASTM D696		mm/mm°C	7.1 x 10 <sup>-5</sup>
Flammability	Method	Condition	Unit	Value
Flammability	UL94		class	HB

The values quoted are the average of results obtained under laboratory conditions and are given only as an indication to enable customers to make use of our products.

Prospective users should determine the suitability of materials before adopting them on a commercial scale.

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