

Kingfa PA6-G15

Polyamide 6
Kingfa

Technical Data

General

Material Status	• Commercial: Active		
UL Yellow Card ¹	• E171666-225722		
Search for UL Yellow Card	• Kingfa		
Availability	• Asia Pacific	• North America	
Filler / Reinforcement	• Glass Fiber Reinforcement, 15% Filler by Weight		
Features	• Good Surface Finish	• Low Temperature Impact Resistance	• Warp Resistant
Uses	• Appliances • Automotive Applications	• Power/Other Tools • Sporting Goods	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.24 g/cm³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 23°C	0.60 %	
Across Flow: 23°C	1.2 %	
Water Absorption (23°C, 24 hr)	0.60 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³	125 MPa	ASTM D638
Tensile Elongation ³ (Break)	4.1 %	ASTM D638
Flexural Modulus ⁴	5760 MPa	ASTM D790
Flexural Strength ⁴	175 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm)	95 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	119	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed, 6.40 mm	215 °C	
1.8 MPa, Unannealed, 6.40 mm	207 °C	

Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+16 ohm·cm	ASTM D257

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.50 mm	HB	
3.00 mm	HB	

Injection	Nominal Value Unit
Drying Temperature	90.0 to 110 °C
Drying Time	4.0 to 6.0 hr
Rear Temperature	225 to 245 °C
Middle Temperature	250 to 270 °C
Front Temperature	260 to 280 °C
Processing (Melt) Temp	255 to 285 °C
Mold Temperature	50.0 to 70.0 °C
Injection Rate	Moderate-Fast

Injection Notes
Processing Temperature Limit: 300°C