

Kingfa PA6-G50

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, 50% 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	1.56 g/cm³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 23°C	0.20 %	
Across Flow: 23°C	0.70 %	
Water Absorption (23°C, 24 hr)	0.60 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³	195 MPa	ASTM D638
Tensile Elongation ³ (Break)	4.1 %	ASTM D638
Flexural Modulus ⁴	13000 MPa	ASTM D790
Flexural Strength ⁴	295 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm)	200 J/m	ASTM D256
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	122	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed, 6.40 mm	220 °C	
1.8 MPa, Unannealed, 6.40 mm	214 °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		