

Kingfa PA6-RG30

Polyamide 6
Kingfa

Technical Data

General

Material Status	• Commercial: Active	
UL Yellow Card ¹	• E171666-225724	
Search for UL Yellow Card	• Kingfa	
Availability	• Asia Pacific	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight	
Features	• Flame Retardant • Good Electrical Properties	• High Heat Resistance • High Strength
Uses	• Connectors	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.52 g/cm³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 23°C	0.40 %	
Across Flow: 23°C	0.90 %	
Water Absorption (23°C, 24 hr)	0.60 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³	145 MPa	ASTM D638
Tensile Elongation ³ (Break)	2.1 %	ASTM D638
Flexural Modulus ⁴	8500 MPa	ASTM D790
Flexural Strength ⁴	210 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm)	120 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	120	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	215 °C	

Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+15 ohm·cm	ASTM D257

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.900 mm	V-0	
1.50 mm	V-0	

Injection	Nominal Value Unit
Drying Temperature	90.0 to 110 °C
Drying Time	4.0 to 6.0 hr
Rear Temperature	220 to 240 °C
Middle Temperature	240 to 260 °C
Front Temperature	255 to 275 °C
Processing (Melt) Temp	250 to 270 °C
Mold Temperature	30.0 to 60.0 °C
Injection Rate	Moderate-Fast

Injection Notes
Processing Temperature Limit: 300°C