

Kingfa PA6-M20G16

Polyamide 6
Kingfa

Technical Data

General		
Material Status	• Commercial: Active	
Search for UL Yellow Card	• Kingfa	
Availability	• Asia Pacific	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 20% Filler by Weight	• Mineral Filler, 16% Filler by Weight
Features	• Good Abrasion Resistance	• Good Surface Finish • Warp Resistant
Uses	• Automotive Applications	
Forms	• Pellets	
Processing Method	• Injection Molding	
Physical	Nominal Value Unit	Test Method
Specific Gravity	1.41 g/cm³	ASTM D792
Molding Shrinkage - Flow (23°C)	0.40 to 0.60 %	ASTM D955
Water Absorption (23°C, 24 hr)	0.60 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ²	110 MPa	ASTM D638
Tensile Elongation ² (Break)	2.1 %	ASTM D638
Flexural Modulus ³	7800 MPa	ASTM D790
Flexural Strength ³	180 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)	121	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed, 6.40 mm	218 °C	ASTM D648
1.8 MPa, Unannealed, 6.40 mm	208 °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
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		