

Genestar™ GW2458HF
Polyamide 9T
Kuraray America, Inc.



Prospector

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 45% Filler by Weight
Features	• High Flow • Low Warpage
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.73	1.73 g/cm ³	
Melt Mass-Flow Rate (MFR) (320°C/2.16 kg)	64 g/10 min	64 g/10 min	ASTM D1238
Molding Shrinkage			
Flow: 0.0394 in (1.00 mm)	0.00030 in/in	0.030 %	
Across Flow: 0.0394 in (1.00 mm)	0.0040 in/in	0.40 %	
Water Absorption ² (Saturation, 104°F (40°C))	0.80 %	0.80 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength	23900 psi	165 MPa	ASTM D638
Tensile Elongation (Break)	3.5 %	3.5 %	ASTM D638
Flexural Modulus	2.18E+6 psi	15000 MPa	ASTM D790
Flexural Strength	32600 psi	225 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	2.34 ft-lb/in	125 J/m	ASTM D256

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	545 °F	285 °C	ASTM D648
Glass Transition Temperature (DSC)	257 °F	125 °C	
Melting Temperature	583 °F	306 °C	

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	1.0E+16 ohm-cm	1.0E+16 ohm-cm	ASTM D257
Dielectric Strength	760 V/mil	30 kV/mm	ASTM D149
Relative Permittivity (10 GHz)	3.80	3.80	ASTM D150
Dissipation Factor (10 GHz)	0.010	0.010	ASTM D150

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating - UL	V-0	V-0	UL 94

UL 746	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index (CTI) (PLC)	PLC 0	PLC 0	UL 746

Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Bar Flow Length ³ 608°F (320°C), 19.7 mil (500.0 µm)	2.8 in	7.10 cm	
Weld Elongation	0.30 %	0.30 %	ASTM D638
Weld Strength	5.08 ksi	35.0 MPa	ASTM D638

Notes

¹ Typical properties: these are not to be construed as specifications.

² 90%RH, 96 hrs

³ 750 kgf