



OmniLon™
PA6 GR50

50% Glass Reinforced, Nylon 6

PHYSICAL	Units	ASTM/ISO Procedure	English	Metric
Specific Gravity		D792	1.56	1.56
Filler/Reinforcement	%	D5630	50	50
IMPACT				
Izod Impact Resistance Notched 1/8" bar, 73°F	ft.-lbs/in. (J/m)	D256	3	160
MECHANICAL				
Tensile Strength At Yield, 73°F	psi (MPa)	D638	32,000	221
Tensile Elongation	%	D638	3	3
Flexural Modulus	psi (MPa)	D790	2,000,000	13,800
Flexural Strength	psi (MPa)	D790	45,500	314
THERMAL				
Deflection Temperature 1/8" bar, 66 psi	°F (°C)	D648	425	218
1/8" bar, 264 psi	°F (°C)	D648	415	213
FLAMMABILITY				
Flame Resistance *Omni Internal Testing	.125"	UL94	HB*	HB*
RECOMMENDED PROCESSING CONDITIONS				
Drying Temperature			180° F	
Drying Time			2 to 4 Hours	
Maximum Moisture			0.20%	
Rear Zone(s)			480 to 540° F	
Middle Zone(s)			500 to 560° F	
Front Zone(s)			500 to 560° F	
Nozzle			520 to 560° F	
Mold Temperature			80 to 180° F	
Melt Temperature			500 to 560° F	
Back Pressure			50 psi	

Values are based on natural or black materials unless otherwise noted. Properties and values herein are based on laboratory test specimens and should not be used to establish minimum specification limits or fabricate tooling.

Omni does not guarantee the accuracy of this information or the suitability of this product in any given application or usage situation.