



**OmniLon™**  
**HTPA GR50 HS**

50% Glass Reinforced, Heat Stabilized, Nylon 6/6 & Polyphthalamide Compound

PHYSICAL	Units	ASTM/ISO Procedure	English	Metric
Specific Gravity		D792	1.55	1.55
Filler/Reinforcement	%	D5630	50	50
<b>IMPACT</b>				
Izod Impact Resistance Notched 1/8" bar, 73°F	ft.-lbs/in. (J/m)	D256	2.4	128
<b>MECHANICAL</b>				
Tensile Strength At Yield, 73°F	psi (MPa)	D638	37,500	259
Tensile Elongation	%	D638	3	3
Flexural Modulus	psi (MPa)	D790	2,300,000	15,856
Flexural Strength	psi (MPa)	D790	52,000	359
<b>THERMAL</b>				
Deflection Temperature 1/8" bar, 66 psi	°F (°C)	D648	-	-
1/8" bar, 264 psi	°F (°C)	D648	460	238
<b>FLAMMABILITY</b>				
Flame Resistance *Omni Internal Testing	.125"	UL94	HB*	HB*
<b>RECOMMENDED PROCESSING CONDITIONS</b>				
Drying Temperature			250° F	
Drying Time			4 Hours	
Maximum Moisture			0.06%	
Rear Zone(s)			600 to 615° F	
Middle Zone(s)			600 to 625° F	
Front Zone(s)			600 to 630° F	
Nozzle			600 to 630° F	
Mold Temperature			150 to 200° F	
Melt Temperature			600 to 650° F	
Back Pressure			50 to 100 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.