AuroraGuard™ 630GFIM

Aurora Material Solutions, LLC - *Polyamide 6*

General Information

Product Description			
30% Glass Fiber Reinforced, Heat Stabilized Nylon 6 Formerly known as EnLon 630GFIM			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized		
Uses	• Automotive Applications		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow (0.126 in)	3.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (Saturation, 73°F)	6.6	%	ASTM D570
Water Absorption (Equilibrium, 73°F, 50% RH)	2.1	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.31E+6	psi	ASTM D638
Tensile Strength (Yield)	26100	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.23E+6	psi	ASTM D790
Flexural Strength	36300	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	2.2	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	423	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ASTM D648
Vicat Softening Temperature	401	°F	ASTM D1525
Peak Melting Temperature	430	°F	ASTM D3418
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.12 in)	HB		UL 94

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	185	°F
Drying Time	3.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	428 to 500	°F
Middle Temperature	446 to 509	°F
Front Temperature	482 to 518	°F
Mold Temperature	131 to 203	°F
Back Pressure	50.8 to 102	psi
Screw Speed	60 to 90	rpm