

AuroraGuard™ 630GFIMU

Aurora Material Solutions, LLC - Polyamide 6

General Information

Product Description

30% Glass Fiber Reinforced, Heat Stabilized Nylon 6, UV Stabilized

Formerly known as EnLon 630GFIMU

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	• UV Stabilizer	
Features	• Heat Stabilized	• UV 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 (24 hr, 73°F, 50%)	2.1	%	ASTM D570
Water Absorption (Saturation, 73°F)	6.6	%	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	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	3.0 to 4.0	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
Injection Notes		
Maximum Drying Time 4.0 hrs		

