

AuroraGuard™ PX55MGZ

Aurora Material Solutions, LLC - Polyamide

General Information

Product Description

55% Glass Filled and Mineral Filled, Amorphous Nylon alloy

Formerly known as EnLon PX55MGZ

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber/Mineral, 55% Filler by Weight
Features	• Amorphous
Uses	• Metal Replacement
Appearance	• Black • Natural Color
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.71		ASTM D792
Molding Shrinkage - Flow (0.126 in)	5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.95E+6	psi	ASTM D638
Tensile Strength (Yield)	22000	psi	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	2.90E+6	psi	ASTM D790
Flexural Strength	35000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.2	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	440	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	429	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	2.0 to 12	hr
Suggested Max Moisture	0.020	%
Rear Temperature	518	°F
Middle Temperature	527	°F
Front Temperature	536	°F
Nozzle Temperature	536	°F
Mold Temperature	248 to 284	°F
Screw Speed	60 to 150	rpm

