

AuroraGuard™ ENV17-70776

Aurora Material Solutions, LLC - Polyetherimide

General Information
Product Description

AuroraGuard™ ENV17-70776 is a 10% glass fiber reinforced, black Polyetherimide (PEI) injection molding grade.

Formerly known as ENVIROPLAS® ENV17-70776

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Flame Retardant • High Stiffness • Good Thermal Stability • High Strength
Uses	• Aircraft Applications • Furniture • Pharmaceuticals • Automotive Applications • Personal Care
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.34		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	7.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Ash Content	10	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	16000	psi	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638
Flexural Modulus	740000	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			Internal Method
0.06 in	V-0		
0.13 in	5VA		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	4.0 to 6.0	hr
Rear Temperature	630 to 750	°F
Middle Temperature	640 to 750	°F
Front Temperature	650 to 750	°F
Nozzle Temperature	650 to 750	°F
Mold Temperature	275 to 325	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

