

AuroraGuard™ ENV17-30G18011

Aurora Material Solutions, LLC - Polyetherimide

General Information

Product Description

AuroraGuard™ ENV17-30G18011 is a 30% Fiberglass Reinforced, Natural Polyetherimide (PEI).

Formerly branded as ENVIROPLAS®.

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	• Flame Retardant		
Features	• Flame Retardant • Good Thermal Stability	• High Stiffness • High Strength	
Uses	• Aircraft Applications • Automotive Applications	• Furniture • Pharmaceuticals	• Rail Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Amber		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.51		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	5.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Ash Content	30	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	23000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.24E+6	psi	ASTM D790
Flexural Strength	32000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.6	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 (0.06 in)	• V-0 • 5VA		Internal Method

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	70.0 to 150	psi
Screw Speed	40 to 70	rpm

