

AuroraGuard™ 170-(a)

Aurora Material Solutions, LLC - Polyetherimide

General Information
Product Description

AuroraGuard™ 170-(a) is an unreinforced injection molding grade of Polyetherimide (PEI.)

 (a) denotes a specified color descriptor.
 Available in transparent amber and custom opaque colors.

Formerly branded as ENVIROPLAS®.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Features	• Flame Retardant • High Stiffness • Good Thermal Stability • High Strength
Uses	• Aircraft Applications • Automotive Applications • Batteries
RoHS Compliance	• RoHS Compliant
UL File Number	• E192776
Appearance	• Clear Amber • Colors Available • Opaque
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	15800	psi	ASTM D638
Tensile Elongation (Break)	55	%	ASTM D638
Flexural Modulus	510000	psi	ASTM D790
Flexural Strength	23600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.60	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
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

Notes

¹ Typical properties: these are not to be construed as specifications.

