AuroraGuard™ 170-19284
Aurora Material Solutions, LLC - *Polyetherimide*

General Information

Product Description

AuroraGuard™ 170-19284 is an Unreinforced, Flame Retardant, Translucent/Medium Amber, Polyetherimide (PEI), Injection Molding Grade.

Formerly branded as ENVIROPLAS®.

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Additive	• Flame Retardant	
Features	• Flame Retardant • Good Thermal Stability	• High Stiffness • High Strength
Uses	• Aircraft Applications • Automotive Applications	• Electrical/Electronic Applications • Lighting Applications
RoHS Compliance	• RoHS Compliant	
UL File Number	• E192776	
Appearance	• Amber	
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)	18	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)	16000	psi	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638
Flexural Modulus	458000	psi	ASTM D790
Flexural Strength	23700	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)	370	°F	ASTM D648
RTI Elec			UL 746B
0.06 in	221	°F	
0.12 in	221	°F	
RTI Imp			UL 746B
0.06 in	221	°F	
0.12 in	221	°F	
RTI Str			UL 746B
0.06 in	221	°F	
0.12 in	221	°F	

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 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.