

AuroraGuard™ 170-11010

Aurora Material Solutions, LLC - Polyetherimide

General Information

Product Description

AuroraGuard™ 170-11010 in an Unfilled, Transparent/Natural Amber Tint, Polyetherimide Injection Molding Grade.

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		
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)	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

