AuroraGuard™ ENV13-1502GFR-BK

Aurora Material Solutions, LLC - *Polycarbonate*

General Information

Product Description

AuroraGuard™ ENV13-1502GFR-7000 is a 10% Fiberglass Reinforced, Flame Retardant, UV Stabilized, Black Polycarbonate Injection Molding Grade,

Formerly branded as ENVIROPLAS®

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Flame Retardant	• Mold Release	
Features	• Flame Retardant	• Good Mold Release	
Uses	• Appliances • Automotive Applications • Construction Applications	• Displays • Electrical/Electronic Applications • Electronic Displays	• Industrial Applications • Medical/Healthcare Applications
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E.192776		
Appearance	• Black		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	9600	psi	ASTM D638
Tensile Elongation (Break)	10	%	ASTM D638
Flexural Modulus	500000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	2.0	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	288	°F	ASTM D648
RTI Elec			UL 746B
0.06 in	176	°F	
0.09 in	176	°F	
0.12 in	176	°F	
RTI Imp			UL 746B
0.06 in	176	°F	
0.09 in	176	°F	
0.12 in	176	°F	
RTI Str			UL 746B
0.06 in	176	°F	
0.09 in	176	°F	
0.12 in	176	°F	

Electrical	Nominal Value	Unit	Test Method
High Amp Arc Ignition (HAI)			UL 746A
0.06 in	PLC 1		
0.09 in	PLC 1		
0.12 in	PLC 1		
Hot-wire Ignition (HWI)			UL 746A
0.06 in	PLC 1		
0.09 in	PLC 1		
0.12 in	PLC 1		

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.09 in	V-0		
0.12 in	• V-0 • 5VA		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	500 to 540	°F
Middle Temperature	520 to 560	°F
Front Temperature	520 to 560	°F
Nozzle Temperature	480 to 520	°F
Mold Temperature	180 to 200	°F
Injection Rate	Moderate	
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.