AuroraGuard™ ENV13-70201

Aurora Material Solutions, LLC - *Polycarbonate*

General Information

Product Description

AuroraGuard ENV13-70201 is a 6.0 % glass fiber reinforced, flame retardant, high viscosity, black Polycarbonate (PC) for use with the appropriate blowing agent for structural foamed molded applications.

Formerly branded as ENVIROPLAS®

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 6.0% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant		
Uses	• Structural Parts		
Agency Ratings	• EU Annex XVII of Regulation (EC) No 1907/2006		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E192776		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Structural Foam Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	9300	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	420000	psi	ASTM D790
Flexural Strength	15200	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	4.2	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	265	°F	ASTM D648
RTI Elec	176	°F	UL 746B
RTI Imp	176	°F	UL 746B
RTI Str	176	°F	UL 746B
Electrical	**Nominal Value**	**Unit**	**Test Method**
High Amp Arc Ignition (HAI) (0.118 in)	150		UL 746A
Hot-wire Ignition (HWI) (1.18 in)	46	sec	UL 746A
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.24 in, Foamed)	• V-0 • 5VA		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	< 250	°F
Drying Time - Desiccant Dryer	4.0	hr
Suggested Max Moisture	0.020	%

Rear Temperature	520 to 550 °F
Middle Temperature	530 to 570 °F
Front Temperature	550 to 610 °F
Nozzle Temperature	540 to 580 °F
Mold Temperature	120 to 200 °F
Injection Rate	Moderate
Back Pressure	150 to 250 psi
Screw Speed	50 to 80 rpm

Notes

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