

AuroraTec™ 392-(a)F

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

Foamable – Injection Molding Grade, 8.0% Fiberglass Reinforced, UV Stabilized, Flame Retardant, w/Mold Release. UL94 Flame Rated and UL746C (f1) Outdoor Exposure, Water Exposure and Immersion Recognized Product. REACH and RoHS Compliant. Note: 392-(a)F Denotes UL Recognizes the (a) to Represent a 4 or 5 Digit Number Indicating Natural, Black or Custom Color.

Formerly known as ENVIRON® 392-(a)F

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 8.0% Filler by Weight
Additive	• Flame Retardant • Mold Release • UV Stabilizer
Features	• Flame Retardant • Foamable • Good Mold Release • UV Stabilized
Uses	• Electrical/Electronic Applications • Outdoor Applications • Telecommunications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
UL File Number	• E.192776
Appearance	• Black • Colors Available • Natural Color
Processing Method	• Foam Processing • Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.14		ASTM D792
Melt Mass-Flow Rate (MFR) ³ (250°C/5.0 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow ³ (0.236 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Outdoor Suitability	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Break, 0.236 in)	7400	psi	ASTM D638
Tensile Elongation ³ (Break)	10	%	ASTM D638
Flexural Modulus ³	441000	psi	ASTM D790
Flexural Strength ³ (0.236 in)	12600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact ³ (73°F)	13	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ³ (264 psi, Unannealed)	225	°F	ASTM D648
RTI Elec ³ (0.12 in)	167	°F	UL 746B
RTI Imp ³ (0.12 in)	167	°F	UL 746B
RTI Str ³ (0.12 in)	167	°F	UL 746B
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+18	ohms·cm	IEC 60093
Electric Strength	480	V/mil	IEC 60243-1
High Amp Arc Ignition (HAI)			UL 746A
0.13 in		PLC 0	
0.24 in		PLC 0	



Hot-wire Ignition (HWI)		UL 746A
0.13 in	PLC 2	
0.24 in	PLC 1	
Flammability	Nominal Value	Unit
Flame Rating		Test Method
0.13 in	V-0	UL 94
0.24 in	• V-0	
	• 5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 500	°F
Front Temperature	480 to 510	°F
Nozzle Temperature	470 to 500	°F
Mold Temperature	160 to 200	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 150	psi
Screw Speed	50 to 80	rpm

Notes

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

² 6.0 mm (1.27 not foamed)

³ Foamed - 10% Weight Reduction

