

**AuroraTec™ 397-(a)**

Aurora Material Solutions, LLC - Polycarbonate + PBT

**General Information**
**Product Description**

AuroraTec 397-(a) is an unreinforced, impact modified flame-retardant, Polybutylene Terephthalate/Polycarbonate (PBT/PC) injection molding grade. It has excellent chemical resistance and UL94 V0 @ 1.5 mm and 5VA @ 3.0mm flame ratings. UL recognizes the (a) portion of the product code to represent a 5-digit number indicating natural, black, or custom opaque color. Formerly branded as ENVIRON®

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant	• Impact Modifier	• Mold Release
Features	• Flame Retardant	• Good Mold Release	• Impact Modified
Uses	• Furniture • Housings	• Industrial Applications • Power/Other Tools	
Agency Ratings	• EU Annex XVII of Regulation (EC) No 1907/2006		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E.192776		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.28		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.010 to 0.012	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8200	psi	ASTM D638
Tensile Elongation (Break)	90	%	ASTM D638
Flexural Modulus	350000	psi	ASTM D790
Flexural Strength	12300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	12	ft-lb/in	ASTM D256
Gardner Impact (73°F)	400	in-lb	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	185	°F	ASTM D648
RTI Elec			UL 746B
0.06 in		176 °F	
0.12 in		176 °F	
RTI Imp			UL 746B
0.06 in		176 °F	
0.12 in		176 °F	
RTI Str			UL 746B
0.06 in		176 °F	
0.12 in		176 °F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in	•	V-0	
	•	5VA	



## Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	< 225	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	470 to 490	°F
Middle Temperature	470 to 490	°F
Front Temperature	490 to 510	°F
Nozzle Temperature	470 to 490	°F
Mold Temperature	130 to 150	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 200	psi
Screw Speed	50 to 80	rpm

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

