

AuroraTec™ 399-(a)

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

AuroraTec 399-(a) is a 15% fiberglass reinforced, flame retardant, Polycarbonate/Polybutylene Terephthalate (PC/PBT) injection molding grade.

UL Recognizes the (a) designation of the product code as a 5-digit number indicating natural, black, or custom opaque color.

Formerly branded as ENVIRON® 399-(a)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Additive	• Flame Retardant	• Mold Release	
Features	• Chemical Resistant	• Good Dimensional Stability	• Good Stiffness
	• Flame Retardant	• Good Mold Release	
Uses	• Electrical/Electronic Applications	• Housings	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E192776		
Appearance	• Black	• Natural Color	• Opaque
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.42		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	13500	psi	ASTM D638
Tensile Elongation (Break)	3.8	%	ASTM D638
Flexural Modulus	780000	psi	ASTM D790
Flexural Strength	23300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.4	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	284	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.10 in	•	V-0	
	•	5VA	
0.12 in		5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
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	150 to 190 °F
Injection Rate	Moderate-Fast
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.

