AuroraTec™ 398-18008

Aurora Material Solutions, LLC - *Polycarbonate + PBT*

General Information

Product Description

AuroraTec™ 398-18008 is a 30% Fiberglass Reinforced, Flame Retardant, Impact Modified, Natural Polybutylene Terephthalate/Polycarbonate (PBT/PC) Injection Molding Grade.

Formerly Branded as ENVIRON®

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemical Resistant • Flame Retardant	• Good Mold Release • Impact Modified	• Low Shrinkage • Low Warpage
Uses	• Appliance Components • Electrical/Electronic Applications • Handles	• Housings • Pump Parts • Structural Parts	• Thin-walled Parts
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E.192776		
Appearance	• Natural Color		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.58		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	24	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	16400	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.42E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	1.5	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	280	°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
0.03 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	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.