AuroraTec™ 291-70000
Aurora Material Solutions, LLC - *Polycarbonate + PBT*

General Information

Product Description

Injection Molding Grade, 30% Fiberglass Reinforced, Black, Flame Retardant, w/Mold Release.
UL94 Flame Rated Product. REACH and RoHS Compliant.

Formerly known as ENVIRON® 291-70000

General

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

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.57		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	14	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)	18000	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	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)	1.4	ft·lb/in	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	280	°F	ASTM D648
RTI Elec (0.09 to 0.11 in)	176	°F	UL 746B
RTI Imp (0.09 to 0.11 in)	176	°F	UL 746B
RTI Str (0.09 to 0.11 in)	176	°F	UL 746B

Flammability		Nominal Value	Unit	Test Method
Flame Rating (0.09 to 0.11 in)	•	V-0		UL 94
	•	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	
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.