

AuroraTec™ ENV29-10821

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

AuroraTec™ ENV29-10821 is a 11% Fiberglass Reinforced, Natural Polycarbonate / Polybutylene Terephthalate (PC/PBT) Injection Molding Grade. This Provides Impact and Chemical Resistance.

Formerly branded as ENVIRON.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Features	• Good Mold Release
Uses	• Electrical/Electronic Applications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium, 73°F, 50%)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	593000	psi	ASTM D638
Tensile Strength (Break)	12600	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	571000	psi	ASTM D790
Flexural Strength	19400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.2	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	260	°F	ASTM D648
Vicat Softening Temperature	246	°F	ASTM D1525
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	215 to 230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 520	°F
Middle Temperature	490 to 530	°F
Front Temperature	500 to 540	°F
Nozzle Temperature	500 to 540	°F
Mold Temperature	160 to 190	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 200	psi
Screw Speed	50 to 80	rpm

