PolySource

AuroraTec™ ENV39-11031
Aurora Material Solutions, LLC - *Polycarbonate + PBT*

General Information

Product Description

AuroraTec™ ENV39-11031 is an Impact-Modified, Natural Polycarbonate / Polybutylene Terephthalate (PC/PBT) injection Moldng grade, Provides Excellent Low Temperature Impact and Chemical Resistance.

Formerly branded as ENVIRON®.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	
	• Europe	• North America	
Features	• Chemical Resistant	• Good Mold Release	• Low Temperature Impact Resistance
Uses	• Automotive Applications	• Construction Applications	• Consumer Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.010 to 0.012	in/in	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	281000	psi	ASTM D638
Tensile Strength (Yield)	7100	psi	ASTM D638
Tensile Elongation (Break)	> 120	%	ASTM D638
Flexural Modulus	255000	psi	ASTM D790
Flexural Strength	11800	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	10	ft·lb/in	
73°F	13	ft·lb/in	
Gardner Impact [2]	384	in·lb	ASTM D3029

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185 to 225	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F
Front Temperature	490 to 530	°F
Nozzle Temperature	490 to 530	°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.

[2] N.F.E.