

AuroraTec™ ENV39-18001

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

AuroraTec™ ENV39-18001 is an Impact-Modified, UV stabilized, Natural Polycarbonate / Polybutylene Terephthalate (PC/PBT) Injection Molding Grade, Provides Excellent Low Temperature Impact and Chemical Resistance.

Formerly branded as ENVIRON®.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Chemical Resistant	• Good Mold Release	• Low Temperature Impact Resistance
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • Electrical/Electronic Applications	• Outdoor 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	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow	8.0E-3 to 0.011	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7800	psi	ASTM D638
Tensile Elongation (Break)	> 100	%	ASTM D638
Flexural Modulus	296000	psi	ASTM D790
Flexural Strength	11800	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	12	ft·lb/in	
73°F	14	ft·lb/in	
Gardner Impact ²	480	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.

