

AuroraTec™ ENV39-18002

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

AuroraTec™ ENV39-18002 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	• 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	1.18		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.

