

**AuroraTec™ ENV39-78001**

Aurora Material Solutions, LLC - Polycarbonate + PBT

**General Information**
**Product Description**

AuroraTec™ ENV39-78001 is an Impact-Modified, UV stabilized, Black 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	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
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
<b>Mechanical</b>			
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
<b>Impact</b>			
Notched Izod Impact			ASTM D256
-22°F	12	ft-lb/in	
73°F	14	ft-lb/in	
Gardner Impact <sup>2</sup>	480	in-lb	ASTM D3029
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
<b>Flammability</b>			
Flame Rating (0.06 in)	HB		Internal Method

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> N.F.E.

