

**AuroraGuard™ ENV13-NC160**

Aurora Material Solutions, LLC - Polycarbonate

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

Injection Molding - Structural Foaming Grade, Flame Retardant, 10% Fiberglass, Reinforced, High Heat and Impact Resistance, RoHS Compliant  
 NC0160 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.  
 The ENV13 Series Products Are Available With Mold Release and/or UV Stabilizer.  
 Contact Enviropas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV13-NC160

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant	• Good Impact Resistance	
	• Foamable	• High Heat Resistance	
Uses	• Electrical/Electronic Applications	• Outdoor Applications	• Structural Foam
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 6.0E-3	in/in	ASTM D955
Ash Content	10	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	7800	psi	ASTM D638
Flexural Modulus	500000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.2	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	288	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	• V-0		Internal Method
	• 5VA		

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	225	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	490 to 510	°F
Middle Temperature	560 to 600	°F
Front Temperature	560 to 600	°F
Nozzle Temperature	520 to 560	°F
Mold Temperature	165 to 200	°F



---

**Injection Notes**

---

Recommended Drying Conditions: 4 hours @ 225 °F for Blowing Agent

Recommended Blowing Agent Concentration: 1.5% nominal/ range 3 to 5%

---

**Notes**

---

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

