

## AuroraGuard™ ENV13-NC180

Aurora Material Solutions, LLC - Polycarbonate

### General Information

#### Product Description

Injection Molding Grade, 20% Fiberglass Reinforced, w/Mold Release, Increased Toughness, High Heat Resistance, RoHS Compliant  
 NC180 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.  
 The ENV13 Series Products Are Available With UV Stabilizer.  
 Contact Enviroplas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV13-NC180

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Mold Release		
Features	• Good Mold Release	• Good Toughness	• High Heat Resistance
Uses	• Automotive Applications	• Construction Applications	• Electrical/Electronic Applications
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	1.35		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Ash Content	20	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	15000	psi	ASTM D638
Flexural Modulus	785000	psi	ASTM D790
Flexural Strength	18600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.9	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	285	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-1		Internal Method

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	225	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	560 to 600	°F
Middle Temperature	580 to 620	°F
Front Temperature	600 to 640	°F
Nozzle Temperature	590 to 630	°F
Mold Temperature	180 to 240	°F



Injection Rate	Moderate
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

#### Notes

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

