

## AuroraGuard™ ENV14-NC810

Aurora Material Solutions, LLC - Polycarbonate

### General Information

#### Product Description

Injection Molding Grade, Non-Bromine - Non-Chlorine Flame retardant, Impact Modified, w/Mold Release, UV Stabilized. Ideal for Outdoor Exposure Applications Requiring Ignition, Hydrolytic and UV Resistance along with Thermal Performance.  
 NC810 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.  
 Contact Enviropas regarding UL recognized versions of this product.

Formerly known as ENVIROPLAS® ENV14-NC810

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant • Impact Modifier		
Features	• Bromine Free • Chlorine Free	• Mold Release • UV Stabilizer	• Impact Modified • UV Resistant
Uses	• Outdoor 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	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8800	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	340000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	15	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	250	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			Internal Method
0.06 in	V-0		
0.12 in	5VA		

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	490 to 530	°F
Middle Temperature	490 to 530	°F
Front Temperature	490 to 530	°F
Nozzle Temperature	470 to 510	°F
Mold Temperature	150 to 200	°F



Injection Rate	Moderate-Fast
Back Pressure	0.00 to 50.0 psi
Screw Speed	40 to 70 rpm

#### Notes

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

