

## AuroraGuard™ ENV11-NC720

Aurora Material Solutions, LLC - Polycarbonate

### General Information

#### Product Description

Injection Molding Grade, Translucent - Opaque, Non-Halogenated, Flame Retardant, UV Stabilized, Mold Release, Excellent for Soft, Even, Light Diffusion Performance in LED Lighting Applications, RoHS Compliant

Formerly known as ENVIROPLAS® ENV11-NC720

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant • UV Stabilizer		
Features	• Flame Retardant • Good Mold Release • Halogen Free • UV Resistant		
Uses	• LEDs • Lighting Applications		
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque • Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19		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)	9600	psi	ASTM D638
Tensile Elongation (Break)	80	%	ASTM D638
Flexural Modulus	335000	psi	ASTM D790
Flexural Strength	13500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	13	ft·lb/in	ASTM D256
Gardner Impact (73°F)	400	in·lb	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	255	°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	250	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	490 to 510	°F
Middle Temperature	510 to 530	°F
Front Temperature	510 to 530	°F
Nozzle Temperature	470 to 510	°F
Mold Temperature	155 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

