

**AuroraGuard™ ENV42-NC740**

Aurora Material Solutions, LLC - Polyetherimide + PC

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

Injection Molding Grade, 20% Fiberglass Reinforced, Flame Retardant, High Flow, Excellent Thermal Performance, High Mechanical Strength and Stiffness, RoHS Compliant  
 NC470 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.  
 The ENV42 Series Products Are Available With Mold Release and/or UV Stabilizer.  
 Contact Enviroplas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV42-NC740

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Flame Retardant • High Flow	• High Heat Resistance • High Stiffness	• High Strength
Uses	• Consumer Applications • Housings		
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	1.39		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	45	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	15100	psi	ASTM D638
Flexural Modulus	1.35E+6	psi	ASTM D790
Flexural Strength	27600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.2	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	369	°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	275	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	610 to 630	°F
Middle Temperature	620 to 650	°F
Front Temperature	640 to 670	°F
Nozzle Temperature	630 to 650	°F
Mold Temperature	210 to 230	°F
Injection Rate	Moderate	
Back Pressure	0.00 to 50.0	psi
Screw Speed	40 to 70	rpm

