AuroraGuard™ ENV17-NC050

Aurora Material Solutions, LLC - *Polyetherimide*

General Information

Product Description			
Injection Molding Grade, 20% Fiberglass Reinforced, Natural Amber Tint, Flame Retardant, Excellent Thermal Performance, High Mechanical Strength and Stiffness, RoHS Compliant NC050 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color. The ENV17 Series Products Are Available With Mold Release and/or UV Stabilizer. Contact Enviroplas Regarding UL Recognized Versions Of This Product. Formerly known as ENVIROPLAS® ENV17-NC050			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Good Thermal Stability	• High Stiffness • High Strength	
Uses	• Aircraft Applications • Automotive Applications	• Furniture • Pharmaceuticals	• Rail Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Black • Clear Amber	• Colors Available • Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.42		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Ash Content	20	%	ASTM D5630
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	18700	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	32500	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)	407	°F	ASTM D648
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	• V-0 • 5VA		Internal Method

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	300	°F
Drying Time	4.0 to 6.0	hr
Rear Temperature	630 to 750	°F
Middle Temperature	640 to 750	°F
Front Temperature	650 to 750	°F

Nozzle Temperature	650 to 750 °F
Mold Temperature	275 to 325 °F
Injection Rate	Moderate-Fast
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

Notes

[1] Typical properties: these are not to be construed as specifications.