

AuroraGuard™ PBT-30GF-70497

Aurora Material Solutions, LLC - Polybutylene Terephthalate

General Information

Product Description

AuroraGuard™ PBT-30GF-70497 is a 30% Fiberglass Reinforced, Black Polybutylene Terephthalate (PBT) Injection Molding Grade.

Formerly known as ENVIROPLAS® ENV08-NC470

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
• Europe			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemical Resistant	• Good Dimensional Stability	• High Heat Resistance
Uses	• Appliances	• Electrical Parts	
	• Decorative Parts	• Lawn & Garden Equipment	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.53		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 6.0E-3	in/in	ASTM D955
Ash Content	30	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	17000	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.15E+6	psi	ASTM D790
Flexural Strength	26700	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.4	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	398	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 510	°F
Front Temperature	480 to 520	°F
Nozzle Temperature	470 to 510	°F
Mold Temperature	150 to 190	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 80	rpm

