

AuroraGuard™ ENV15-71755

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information

Product Description

AuroraGuard™ ENV15-71755 is a 12% fiberglass reinforced, black Polycarbonate (PC) injection molding grade.

Formerly branded as ENVIROPLAS®

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Latin America • Europe • North America
Filler / Reinforcement	• Glass Fiber, 12% Filler by Weight
Features	• Good Heat Resistance • Good Mold Release • Good Toughness
Uses	• Construction Applications
Agency Ratings	• EC 1907/2006 (REACH) - SVHC Free
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	18	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)	9500	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	560000	psi	ASTM D790
Flexural Strength	16000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	2.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	235	°F	ISO 75-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	220 to 230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 520	°F
Middle Temperature	500 to 540	°F
Front Temperature	520 to 560	°F
Nozzle Temperature	500 to 540	°F
Mold Temperature	150 to 190	°F
Injection Rate	Slow-Moderate	
Back Pressure	50.0 to 200	psi
Screw Speed	50 to 80	rpm

