AuroraGuard™ ENV12-NC100

Aurora Material Solutions, LLC - *Polycarbonate*

General Information

Product Description

Injection Molding Grade, Excellent For Thick Parts Without Sinks, RoHS Compliant
NC100 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.
The ENV12 Series Products Are Available With Mold Release and/or UV Stabilizer.
Contact Enviroplas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV12-NC100

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Construction Applications • Electronic Displays	• Material Handling • Thick-walled Parts	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
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) (300°C/1.2 kg)	7.0	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)	8990	psi	ASTM D638
Tensile Elongation (Break)	140	%	ASTM D638
Flexural Modulus	339000	psi	ASTM D790
Flexural Strength	14100	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	17	ft·lb/in	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	270	°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
Rear Temperature	520 to 560	°F
Middle Temperature	520 to 560	°F
Front Temperature	560 to 600	°F
Nozzle Temperature	550 to 590	°F
Mold Temperature	155 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm