

AuroraGuard™ ENV08-NC640

Aurora Material Solutions, LLC - Polybutylene Terephthalate

General Information
Product Description

Injection Molding Grade, Natural, Good Chemical/Solvent/Fuel/Oil Resistance, Good Wear and Weather Resistance, High Heat Resistance, Good Moldability

Formerly known as ENVIROPLAS® ENV08-NC640

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Fuel Resistant • Good Moldability • Good Weather Resistance • High Heat Resistance • Oil Resistant • Solvent Resistant • Wear Resistant
Uses	• Appliances • Decorative Parts • Electrical Parts • Lawn & Garden Equipment
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.31		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	46	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.2E-3 to 1.8E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	8000	psi	ASTM D638
Flexural Modulus	355000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.70	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	311	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	140	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	445 to 490	°F
Middle Temperature	445 to 490	°F
Front Temperature	445 to 490	°F
Nozzle Temperature	470 to 490	°F
Mold Temperature	150 to 190	°F
Injection Rate	Moderate-Fast	
Back Pressure	0.00 to 50.0	psi
Screw Speed	60 to 120	rpm

