

AuroraGuard™ ENV48-NC570

Aurora Material Solutions, LLC - Polysulfone

General Information
Product Description

Injection Molding Grade, Excellent Resistance to Oxidation and Hydrolysis, Suitable for Prolonged High Temperature Use (300°F Max.), Chemically Resistant to Mineral Acids, Alkali and Salt Solutions, Good Resistance to Detergents and Hydrocarbon Oils. RoHS Compliant
 NC570 = To Be Assigned 5 Digit Number Indicating Transparent Amber Tint, Black, or Custom Color.

Formerly known as ENVIROPLAS® ENV48-NC570

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Detergent Resistant • High Heat Resistance	• Hydrocarbon Resistant • Hydrolysis Resistant • Oil Resistant	• Oxidation Resistant
Uses	• Appliance Components • Batteries	• Electrical Parts • Food Service Applications	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Clear/Transparent	• Colors Available
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow	6.0E-3 to 9.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.30	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	11000	psi	ASTM D638
Flexural Modulus	350000	psi	ASTM D790
Flexural Strength	14500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.1	ft·lb/in	ASTM D256
Gardner Impact (73°F)	440	in·lb	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	340	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	280	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	625 to 680	°F
Middle Temperature	625 to 680	°F
Front Temperature	625 to 680	°F
Nozzle Temperature	625 to 680	°F
Mold Temperature	250 to 310	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

