

AuroraTec™ ENV39-NC940

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

Injection Molding Grade, 30% Fiberglass Reinforced, Impact Modified, UV Stabilized for Outdoor Exposure, Easy Flow, w/Mold Release. Provide Excellent Chemical Resistance, Rigidity, and Toughness. REACH and RoHS Compliant. NC930 Indicates a 5 Digit Color Number Representing a Natural, Black or Opaque Custom Color. The ENV39 Series of Products are Available with, Process, Thermal and/or UV Stabilizers, Antimicrobial or Other Special Use Additives.

Formerly known as ENVIRON® ENV39-NC940

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Impact Modifier	• Mold Release	• UV Stabilizer
Features	• Chemical Resistant • Good Flow • Good Mold Release	• Good Rigidity • Good Toughness • Impact Modified	• UV Stabilized
Uses	• Industrial Applications • Material Handling	• Medical/Healthcare Applications • Outdoor Applications	• Recreational Vehicle Applications • Sporting Goods
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.43		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	14600	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.17E+6	psi	ASTM D790
Flexural Strength	25600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.2	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	320	°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	230	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	480 to 520	°F
Middle Temperature	500 to 540	°F
Front Temperature	500 to 540	°F
Nozzle Temperature	480 to 520	°F
Mold Temperature	130 to 150	°F



Injection Rate	Moderate
Back Pressure	50.0 to 150 psi
Screw Speed	50 to 80 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

