

AuroraTec™ ENV39-90714

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

AuroraTec™ ENV39-90714 is an impact-modified, grey, Polycarbonate / Polybutylene Terephthalate (PC/PBT) injection molding grade, Provides excellent impact and chemical resistance.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Good Mold Release
Uses	• Automotive Applications • Construction Applications • Consumer Applications • Electrical/Electronic Applications • Outdoor Applications
RoHS Compliance	• RoHS Compliant
Appearance	• Grey
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.17		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.010 to 0.012	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Elongation (Break)	> 150	%	ASTM D638
Flexural Modulus	350000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-22°F	5.0	ft·lb/in	
73°F	14	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	240	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	220	°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	220 to 250	°F
Drying Time	4.0 to 6.0	hr
Drying Time, Maximum	7.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	490 to 550	°F
Middle Temperature	500 to 570	°F
Front Temperature	525 to 575	°F
Nozzle Temperature	530 to 585	°F
Mold Temperature	150 to 200	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 75	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

