AuroraTec™ ENV39-10046

Aurora Material Solutions, LLC - *Polycarbonate + PBT*

General Information

Product Description

AuroraTec™ ENV39-10046 is an Impact-Modified, UV Stabilized, Natural Polycarbonate/Polybutylene Terephthalate (PC/PBT) Injection Molding Grade,

Formerly branded as ENVIRON®.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Additive	• Impact Modifier	• Mold Release	• UV Stabilizer
Features	• Chemical Resistant • Good Mold Release	• High Impact Resistance • Low Temperature Impact Resistance	
Uses	• Consumer Applications	• Electrical/Electronic Applications	
Agency Ratings	• EC 1907/2006 (REACH) - SVHC Free		
RoHS Compliance	• RoHS Compliant		
Appearance	• 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) (250°C/5.0 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow	9.0E-3 to 0.012	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	7400	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	290000	psi	ASTM D790
Flexural Strength	11600	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-22°F	10	ft·lb/in	
73°F	14	ft·lb/in	
Gardner Impact [2]	480	in·lb	ASTM D3029
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	180	°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	215 to 225	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F

Front Temperature	490 to 530	°F
Nozzle Temperature	490 to 530	°F
Mold Temperature	150 to 190	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 300	psi
Screw Speed	50 to 80	rpm

Notes

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

[2] N.F.E.