TRINSEO

EMERGE™ PC 8600ECO-10
Advanced Resin

Overview

EMERGE™ PC 8600ECO-10 Advanced Resin contains 50% post consumer recycled (PCR) polycarbonate complying with IEEE 1680:2006 certified by TÜV Rheinland. It is a translucent and ignition resistant polycarbonate that does not contain chlorine, bromine, or phosphate additives to comply with global environmental standards. This resin combines good mechanical, thermal, and chemical properties while retaining excellent processability.

Applications
- Electronics and electrical appliances
- Charges and adaptors enclosures
- Information technology equipment

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.20	g/cm³	1.20	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	0.50 to 0.70	%	ASTM D955
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus					ASTM D638
0.126 in (3.20 mm), Injection Molded	405000	psi	2800	MPa	
Tensile Strength					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	8850	psi	61.0	MPa	
Break, 0.126 in (3.20 mm), Injection Molded	9570	psi	66.0	MPa	
Tensile Elongation					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	5.0	%	5.0	%	
Break, 0.126 in (3.20 mm), Injection Molded	120	%	120	%	
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					ASTM D256
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	15	ft·lb/in	810	J/m	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
264 psi (1.8 MPa), Unannealed	261	°F	127	°C	ASTM D648
264 psi (1.8 MPa), Unannealed	257	°F	125	°C	ISO 75-2/A
Vicat Softening Temperature					
--	300	°F	149	°C	ASTM D1525 [1]
--	302	°F	150	°C	ISO 306/A120
Ball Indentation Temperature	> 257	°F	> 125	°C	IEC 60335-1
RTI Elec	257	°F	125	°C	UL 746
RTI Imp	257	°F	125	°C	UL 746
RTI Str	257	°F	125	°C	UL 746
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating					UL 94
0.022 in (0.55 mm)		V-2		V-2	
0.06 in (1.5 mm)		V-0		V-0	
0.10 in (2.5 mm)		V-0		V-0	

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Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	248	°F	120	°C
Drying Time	3.0 to 4.0	hr	3.0 to 4.0	hr
Processing (Melt) Temp	518 to 572	°F	270 to 300	°C
Mold Temperature	176 to 230	°F	80 to 110	°C

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] Rate B (120°C/h), Loading 1 (10 N)

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