Technical Information

TRINSEO™

EMERGE™ PC/ABS 7580 EU
Advanced Resin

Overview

EMERGE™ PC/ABS 7580 EU is an ignition resistant PC/ABS blend that contains no chlorinated or brominated flame retardant additives. It has UL94 flammability rating of 1.5mm V-0. It fits into applications that require high heat distortion temperature. It is easy processing and high heat properties make it ideal for optimizing productivity in injection molding. Major applications include: Power adaptor & charger, Laser printer & MFP, Copiers, LAN/WLAN facilities and Electrical & Electronic components. Available in natural or matched colour.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.19	g/cm³	1.19	g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR)					ISO 1133
230°C/3.8 kg	8.0	g/10 min	8.0	g/10 min	
260°C/5.0 kg	37	g/10 min	37	g/10 min	
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	0.40 to 0.60	%	ASTM D955 ISO 294-4
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus	392000	psi	2700	MPa	ISO 527-1
Tensile Stress (Yield)	9430	psi	65.0	MPa	ISO 527-2/50
Tensile Strain					ISO 527-2/50
Yield	4.5	%	4.5	%	
Break	75	%	75	%	
Flexural Modulus	377000	psi	2600	MPa	ISO 178
Flexural Stress	14500	psi	100	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					
73°F (23°C)	12	ft·lb/in	650	J/m	ASTM D256
73°F (23°C)	17	ft·lb/in²	35	kJ/m²	ISO 180/1A
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	221	°F	105	°C	ASTM D648
66 psi (0.45 MPa), Unannealed	225	°F	107	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	205	°F	96.0	°C	ASTM D648
264 psi (1.8 MPa), Unannealed	203	°F	95.0	°C	ISO 75-2/A
Vicat Softening Temperature					
--	248	°F	120	°C	ASTM D1525 [1]
--	235	°F	113	°C	ISO 306/B50
Ball Indentation Temperature [2]	221	°F	105	°C	IEC 60598-1
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [2]					UL 94
0.06 in (1.5 mm)	V-0		V-0		
0.12 in (3.0 mm)	V-0		V-0		

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	176 to 194	°F	80 to 90	°C
Drying Time	3.0 to 4.0	hr	3.0 to 4.0	hr
Processing (Melt) Temp	428 to 518	°F	220 to 270	°C
Mold Temperature	140 to 194	°F	60 to 90	°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)

[2] This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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