



EMERGE™ PC/ABS 7580 Advanced Resin

Overview

EMERGE™ PC/ABS 7580 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.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.19 g/cm ³	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
230°C/3.8 kg	15 g/10 min	15 g/10 min	
260°C/5.0 kg	50 g/10 min	50 g/10 min	
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	9430 psi	65.0 MPa	ASTM D638
Tensile Elongation ¹ (Break)	95 %	95 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	14200 psi	98.0 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	14 ft·lb/in	730 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	221 °F	105 °C	
264 psi (1.8 MPa), Unannealed	205 °F	96.0 °C	
Vicat Softening Temperature	241 °F	116 °C	ASTM D1525 ²
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ³ (0.06 in (1.5 mm))	V-0	V-0	UL 94
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	