

EMERGE™ PC/ABS 7880ECO Advanced Resin

Overview

EMERGE* 7880ECO PC/ABS Advanced Resin is an ignition-resistance PC/ABS blend that contains no chlorine or bromine additives. It contains up to 50% of post consumer recycle (PCR). This resin is suitable for use in a wide variety of applications in the information technology equipment and consumer electronics markets.

Applications:

- Computer peripherals

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.18 g/cm ³	1.18 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
230°C/3.8 kg	10 g/10 min	10 g/10 min	
260°C/2.16 kg	15 g/10 min	15 g/10 min	
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 Strength (Yield)	8700 psi	60.0 MPa	ASTM D638
Tensile Elongation (Break)	60 %	60 %	ASTM D638
Flexural Modulus	363000 psi	2500 MPa	ASTM D790
Flexural Strength	12800 psi	88.3 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	14 ft-lb/in	720 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	176 °F	80.0 °C	
Vicat Softening Temperature	216 °F	102 °C	ASTM D1525 ¹
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	11 ohms-cm	11 ohms-cm	ASTM D257
Dielectric Strength	510 V/mil	20 kV/mm	ASTM D149
Comparative Tracking Index	> 600 V	> 600 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.020 in (0.50 mm)	V-2	V-2	
0.04 in (1.0 mm)	V-0	V-0	
0.08 in (2.0 mm)	5VB	5VB	
Glow Wire Flammability Index			IEC 60695-2-12
0.020 in (0.50 mm)	1760 °F	960 °C	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	176 °F	80 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Processing (Melt) Temp	460 to 510 °F	238 to 266 °C	
Mold Temperature	122 to 165 °F	50 to 74 °C	