

EMERGE™ PC/ABS 7800 Advanced Resin

Overview

EMERGE™ PC/ABS 7800 Advanced Resin is an ignition-resistance PC/ABS blend that contains no chlorine or bromine additives. It contains up to 40% of post consumer recycle (PCR) polycarbonate. This resin is suitable for use in a wide variety of applications in the information technology equipment and consumer electronics markets.

Applications

- TV enclosures
- Monitor enclosures
- Laptop and desktop computer housing
- 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) (230°C/3.8 kg)	12 g/10 min	12 g/10 min	ASTM D1238
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 (Yield)	8700 psi	60.0 MPa	ASTM D638
Tensile Elongation (Break)	50 %	50 %	ASTM D638
Flexural Modulus	380000 psi	2620 MPa	ASTM D790
Flexural Strength	12300 psi	84.8 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	12 ft-lb/in	640 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	198 °F	92.2 °C	
264 psi (1.8 MPa), Unannealed	178 °F	81.1 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹ (0.07 in (1.7 mm))	V-0	V-0	UL 94
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	
Mold Temperature	104 to 140 °F	40 to 60 °C	