

EMERGE™ PC/ABS 7760 Advanced Resin

Overview

EMERGE™ PC/ABS 7760 is an ignition-resistant PC/ABS blend that contains no chlorine or bromine additives. This product provides outstanding toughness and impact strength for extrusion applications. EMERGE™ PC/ABS 7760 is available in custom colors.

Main Characteristics:

- RoHS Compliant
- Ignition Resistance
- Extrusion

Applications:

- Medical equipment housings
- Consumer electronics
- Information technology equipment
- Electrical equipment enclosures

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	3.0 g/10 min	3.0 g/10 min	
260°C/5.0 kg	14 g/10 min	14 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 Modulus			ASTM D638
0.126 in (3.20 mm), Injection Molded	403000 psi	2780 MPa	
Tensile Strength			ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	9720 psi	67.0 MPa	
Break, 0.126 in (3.20 mm), Injection Molded	8990 psi	62.0 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	71 %	71 %	
Flexural Modulus			ASTM D790
0.126 in (3.20 mm), Injection Molded	371000 psi	2560 MPa	
Flexural Strength			ASTM D790
0.126 in (3.20 mm), Injection Molded	15100 psi	104 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-22°F (-30°C), 0.126 in (3.20 mm), Injection Molded	2.4 ft-lb/in	130 J/m	
32°F (0°C), 0.126 in (3.20 mm), Injection Molded	6.6 ft-lb/in	350 J/m	
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	14 ft-lb/in	740 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness			ASTM D785
R-Scale, 0.126 in (3.20 mm), Injection Molded	121	121	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	208 °F	98.0 °C	
264 psi (1.8 MPa), Unannealed	187 °F	86.0 °C	
Vicat Softening Temperature			
--	219 °F	104 °C	ASTM D1525 ¹
--	237 °F	114 °C	ASTM D1525 ²
CLTE			ASTM D696
Flow : -40 to 356°F (-40 to 180°C)	4.1E-5 in/in/°F	7.3E-5 cm/cm/°C	
Transverse : -40 to 356°F (-40 to 180°C)	3.7E-5 in/in/°F	6.7E-5 cm/cm/°C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ³			UL 94
0.06 in (1.5 mm)	V-0	V-0	
0.08 in (2.0 mm)	5VB	5VB	
0.10 in (2.5 mm)	5VA	5VA	
Oxygen Index	33 %	33 %	ASTM D2863