



EMERGE PC 4800-10

Advanced Resin

EMERGE™ PC 4800-10 Advanced Resin provides superior ignition in opaque, injection molding applications. Physical properties and processability are outstanding for this class of polycarbonate resins.

Applications

- Consumer electronics
- Information technology equipment
- Appliances

Physical Properties ⁽¹⁾	Test Method	English Units	SI Units
Specific Gravity	ASTM D 792	1.20	1.20
Melt Flow Rate, 300°C/1.2kg	ASTM D 1238	10 g/10 min	10 g/10 min
Mold Shrinkage, Linear Flow	ASTM D 955	0.005-0.007 in/in	0.005-0.007 mm/mm
Mechanical Properties ⁽²⁾			
Tensile Strength at Yield	ASTM D 638	8,900 psi	61 MPa
Tensile Strength at Break	ASTM D 638	8,500 psi	59 MPa
Tensile Elongation at Break	ASTM D 638	115 %	115 %
Tensile Modulus	ASTM D 638	345,000 psi	2,380 MPa
Flexural Strength	ASTM D 790	14,200 psi	98 MPa
Flexural Modulus	ASTM D 790	338,000 psi	2,330 MPa
Unnotched Izod Impact, 73 F (23 C)	ASTM D 256	No break	No break
Notched Izod Impact 73 F (23 C)	ASTM D 256	13 ft-lb/in	694 J/m
Rockwell Hardness, R Scale	ASTM D 785	123	123
Thermal Properties			
Deflection Temperature Under Load 66 psi (0.45 MPa), annealed 264 psi (1.8 MPa), unannealed	ASTM D 648	279 °F 260 °F	137 °C 127 °C
Vicat Softening Point 50°C/hr, 50N	ASTM D 1525	304 °F	151 °C
Ball Indentation Temperature	IEC 60335-1	> 257 °F	> 125 °C
CLTE, flow, -40 to 82°C	ASTM D 696	36E-6 in/in/°F	65E-6 mm/mm/°C
RTI Electrical	UL746	257 °F	125 °C
RTI Mechanical with Impact	UL746	221 °F	105 °C
RTI Mechanical without Impact	UL746	251 °F	125 °C
Electrical Properties			
Comparative Tracking Index At 2.0 mm thickness	IEC 60112	225 V	225 V
Flammability ⁽³⁾			
UL94 Classification at 0.0625 in (1.6 mm) 0.125 in (3.2 mm)	UL94 UL94	V-0 5VA	V-0 5VA
Limiting Oxygen Index	ASTM D 2863	36 %	36 %
Glow Wire Temperature, 2mm thickness	IEC 60695-2-10	1760 °F	960 °C
Processing Conditions			
Drying Temperature, 3 to 4 hours		250 °F	121 °C
Melt Temperature		550 to 600 °F	288 to 316 °C
Mold Temperature		160 to 220 °F	71 to 104 °C

1. Typical properties; not to be construed as sales specifications. Fabrication conditions, part design, additives, processing aids, finishing materials, and use conditions can all affect the integrity, performance, and regulatory status of finished goods.
2. Tests conducted on 0.125 inch (3.2 mm) injection molded specimen, unannealed, unless noted.
3. This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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Additional Information

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[Published August 2005](#)

