



EMERGE PC/ABS 7600

Advanced Resin

Overview

EMERGE* PC/ABS 7600 is an ignition-resistant PC/ABS blend that contains no chlorine or bromine additives. It combines the superior physical properties of PC & the excellent processability of ABS, resulting in high toughness and high flow. This resin has an excellent balance of cost & performance.

Applications

A wide variety of injection molding applications including:

- Information Technology Equipment Office & Business Equipment
- Consumer Electronics Retail Sales Equipment

Physical Properties ⁽¹⁾	Test Method	English Units	SI Units
Specific Gravity	ASTM D 792	1.18	1.18
Melt Flow Rate, 230°C/3.8kg	ASTM D 1238	19 g/10 min	19 g/10 min
Mold Shrinkage, Linear Flow	ASTM D 955	0.004-0.006 in/in	0.004-0.006 mm/mm
Mechanical Properties ⁽²⁾			
Tensile Strength at Yield	ASTM D 638	8,000 psi	55 MPa
Tensile Strength at Break	ASTM D 638	6,400 psi	44 MPa
Tensile Elongation at Yield	ASTM D 638	4 %	4 %
Tensile Elongation at Break	ASTM D 638	80 %	80 %
Tensile Modulus	ASTM D 638	390,000 psi	2,690 MPa
Flexural Strength	ASTM D 790	12,900 psi	89 MPa
Flexural Modulus	ASTM D 790	410,000 psi	2,830 MPa
Notched Izod Impact, 73°F (23°C)	ASTM D 256	11.0 ft-lb/in	585 J/m
Rockwell Hardness, R Scale	ASTM D 785	118	118
Thermal Properties			
Deflection Temperature Under Load 66 psi (0.45 MPa), unannealed	ASTM D 648	190°F	88°C
264 psi (1.8 MPa), unannealed		171°F	77°C
Vicat Softening Point, 120°C/hr, 10N	ASTM D 1525	215°F	102°C
Ball Indentation Temperature	IEC 60335-1	189°F	87°C
Flammability ⁽³⁾			
UL94 Classification, 1.5 mm	UL94	V-0	V-0
2.0 mm	UL94	5VB	5VB
Limiting Oxygen Index	ASTM D 2863	31 %	31 %
Glow Wire (GWI), 2.0 mm thickness	IEC 60695-2-12	1742°F	950°C
Glow Wire (GWIT), 2.0 mm thickness	IEC 60695-2-13	1562°F	825°C
Processing Conditions			
Drying Temperature, 3 to 4 hours		175°F	80°C
Melt Temperature		420 to 465°F, aim 430°F	215 to 240°C, aim 220°C
Mold Temperature		140 to 160°F	60 to 70°C

Notes

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.

