



CELEX 5200HF.IM Advanced Resin

Introduction

CELEX 5200HF.IM advanced resin is an ignition-resistant PC/ABS blend that contains no chlorine or bromine additives. Its superior processing makes it ideal for molding large parts and optimizing cycle time productivity in injection molding operations. This resin is suitable for use in a wide variety of applications in the information technology equipment and consumer electronics markets.

Main Characteristics

- UL 94 V-0 @ 1.5mm

Applications

- TV, monitor and PC enclosures
- Adaptors and chargers

Properties ⁽¹⁾	Test Method ASTM	S.I.		English	
		Value	Unit	Value	Unit
Physical					
Specific Gravity	D 792	1.17		1.17	
Melt Flow Rate (230°C/3.8 kg)	D 1238	17	g/10 min	17	g/10min
Melt Flow Rate (260°C/5 kg)	D 1238	75	g/10min	75	g/10min
Mold Shrinkage, Linear-Flow	D 955	0.004 – 0.006	mm/mm	0.004 – 0.006	in/in
Mechanical⁽²⁾					
Tensile Strength at Yield (2 in/min)	D 638	62	MPa	9,000	psi
Tensile Strength at Break	D 638	46	MPa	6,700	psi
Elongation at Yield	D 638	4.0	%	4.0	%
Elongation at Break	D 638	50	%	50	%
Flexural Strength	D 790	98	MPa	14,200	psi
Flexural Modulus	D 790	2,830	MPa	410,000	psi
Izod, Notched @ 73°F (23°C)	D 256	650	J/m	12.0	ft-lb/in
Thermal⁽²⁾					
Vicat softening Point, 120°C/hr, 10N	D 1525	108	°C	227	°F
Deflection Temperature Under Load					
@ 264 psi (1.82 MPa)	D 648	82	°C	180	°F
@ 66 psi (0.45 MPa)	D 648	94	°C	201	°F
Flammability⁽³⁾					
UL 94 Classification at 0.059 in (1.5 mm)		V-0		V-0	
Limiting Oxygen Index	D 2863	29	%	29	%
Processing Conditions					
Drying Temperature, 3 to 4 hours		80 – 90	°C	175 – 195	°F
Melt Temperature		220 – 250	°C	428 – 482	°F
Mold Temperature		60 – 90	°C	140 – 195	°F

(1) Typical properties values are 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.

(3) This rating is not intended to reflect hazards presented by this or any other materials under actual fire conditions.

