CELEX™ 5200HF.IM
Polycarbonate Resin

Overview

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

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.17	g/cm³	1.17	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)					ASTM D1238
230°C/3.8 kg	17	g/10 min	17	g/10 min	
260°C/5.0 kg	75	g/10 min	75	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 Strength					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded [1]	9000	psi	62.1	MPa	
Break, 0.126 in (3.20 mm), Injection Molded	6700	psi	46.2	MPa	
Tensile Elongation					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	4.0	%	4.0	%	
Break, 0.126 in (3.20 mm), Injection Molded	50	%	50	%	
Flexural Modulus					ASTM D790
0.126 in (3.20 mm), Injection Molded	410000	psi	2830	MPa	
Flexural Strength					ASTM D790
0.126 in (3.20 mm), Injection Molded	14200	psi	97.9	MPa	
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					ASTM D256
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	12	ft·lb/in	640	J/m	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed, 0.126 in (3.20 mm), Injection Molded	201	°F	93.9	°C	
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm), Injection Molded	180	°F	82.2	°C	
Vicat Softening Temperature	227	°F	108	°C	ASTM D1525 [2]
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [3] (0.06 in (1.5 mm))	V-0		V-0		UL 94
Oxygen Index [3]	29	%	29	%	ASTM D2863

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	175 to 195	°F	79 to 91	°C
Drying Time	3.0 to 4.0	hr	3.0 to 4.0	hr
Processing (Melt) Temp	428 to 482	°F	220 to 250	°C
Mold Temperature	140 to 195	°F	60 to 91	°C