TRINSEO™

CELEX™ 310HF
Polycarbonate Resin

Overview

CELEX 310HF is an ignition resistant and glass fiber reinforced polycarbonate resin. It is formulated without the use of brominated and chlorinated flame retardant. CELEX 310HF is designed with superior processability for use in LCD frame and instrument panel.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.24	g/cm³	1.24	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	19	g/10 min	19	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	0.30 to 0.50	%	ASTM D955
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	10000	psi	69.0	MPa	
Tensile Elongation					ASTM D638
Break, 0.126 in (3.20 mm), Injection Molded	5.0	%	5.0	%	
Flexural Modulus					ASTM D790
0.126 in (3.20 mm), Injection Molded	491000	psi	3390	MPa	
Flexural Strength					ASTM D790
0.126 in (3.20 mm), Injection Molded	12800	psi	88.0	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	1.5	ft·lb/in	80	J/m	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm), Injection Molded	248	°F	120	°C	
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [1] (0.06 in (1.6 mm))	V-0		V-0		UL 94

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	248	°F	120	°C
Drying Time	3.0 to 4.0	hr	3.0 to 4.0	hr
Rear Temperature	500 to 509	°F	260 to 265	°C
Middle Temperature	509 to 518	°F	265 to 270	°C
Front Temperature	518 to 527	°F	270 to 275	°C
Nozzle Temperature	527 to 536	°F	275 to 280	°C
Mold Temperature	176 to 248	°F	80 to 120	°C