TRINSEO™

CELEX™ 501.C
PC/ABS Engineering Resin

Overview

CELEX 501.C is a high flow PC/ABS alloy. It combines the superior physical properties, high heat resistance of PC and the excellent processability of ABS. CELEX 501.C is designed for use in thin wall injection products and mobile phone housing.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.12	g/cm³	1.12	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)					ASTM D1238
230°C/3.8 kg	8.3	g/10 min	8.3	g/10 min	
250°C/5.0 kg	30	g/10 min	30	g/10 min	
260°C/5.0 kg	36	g/10 min	36	g/10 min	
Molding Shrinkage - Flow (0.126 in (3.20 mm))	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 (Yield, 0.126 in (3.20 mm))	7250	psi	50.0	MPa	ASTM D638
Flexural Modulus (0.126 in (3.20 mm))	328000	psi	2260	MPa	ASTM D790
Flexural Strength (0.126 in (3.20 mm))	12200	psi	84.0	MPa	ASTM D790
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	10	ft·lb/in	540	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)	212	°F	100	°C	
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [1] (0.031 in (0.8 mm))	HB		HB		UL 94

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	176	°F	80	°C
Drying Time	3.0 to 4.0	hr	3.0 to 4.0	hr
Rear Temperature	419 to 446	°F	215 to 230	°C
Middle Temperature	446 to 455	°F	230 to 235	°C
Front Temperature	455 to 464	°F	235 to 240	°C
Nozzle Temperature	464 to 482	°F	240 to 250	°C
Mold Temperature	104 to 140	°F	40 to 60	°C