CYCOLOY™ C1200HF resin

Polycarbonate + ABS

SABIC Innovative Plastics

Message:

PC+ABS, excellent flow/impact/high heat resistance. Low temperature ductility. For automotive, appliance and electrical components.

General Information	
UL YellowCard	E121562-221028
Features	Ductile Good Flow Good Impact Resistance High Heat Resistance
Uses	Appliance Components Automotive Applications Electrical/Electronic Applications
Processing Method	Injection Molding
Multi-Point Data	Coefficient of Thermal Expansion vs. Temperature (ASTM E831) Elastic Modulus vs Temperature (ASTM D4065) Flexural DMA (ASTM D4065) Instrumented Impact (Energy) (ASTM D3763) Instrumented Impact (Load) (ASTM D3763) Pressure-Volume-Temperature (PVT - Zoller Method) Shear DMA (ASTM D4065) Specific Heat vs. Temperature (ASTM D3417) Tensile Creep (ASTM D2990) Tensile Fatigue Tensile Stress vs. Strain (ASTM D638) Thermal Conductivity vs. Temperature (ASTM E1530) Viscosity vs. Shear Rate (ASTM D3835)

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.15	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	19	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (265°C/5.0 kg)	24.0	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70	%	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			

-- [1]	2280	MPa	ASTM D638
--	2370	MPa	ISO 527-2/1
Tensile Strength			
Yield [2]	57.2	MPa	ASTM D638
Yield	55.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield [3]	5.0	%	ASTM D638
Yield	4.8	%	ISO 527-2/50
Break [4]	150	%	ASTM D638
Break	110	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span [5]	2340	MPa	ASTM D790
--	2250	MPa	ISO 178
Flexural Stress			
--	86.0	MPa	ISO 178
Yield, 50.0 mm Span [6]	88.3	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			
-30°C	480	J/m	ASTM D256
23°C	590	J/m	ASTM D256
-30°C [7]	34	kJ/m²	ISO 180/1A
23°C [8]	49	kJ/m²	ISO 180/1A
Instrumented Dart Impact			ASTM D3763
-30°C, Total Energy	54.2	J	
23°C, Total Energy	54.2	J	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	129	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span [9]	130	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	113	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span [10]	110	°C	ISO 75-2/Af
Vicat Softening Temperature	130	°C	ISO 306/B50
CLTE - Flow (-40 to 40°C)	7.2E-5	cm/cm/°C	ASTM E831
RTI Elec	105	°C	UL 746
RTI Imp	80.0	°C	UL 746
RTI Str	105	°C	UL 746
Electrical	**Nominal Value**		**Test Method**
Comparative Tracking Index (CTI)	PLC 2		UL 746
High Amp Arc Ignition (HAI)	PLC 1		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	**Nominal Value**		**Test Method**
Flame Rating (1.19 mm)	HB		UL 94

Injection	Nominal Value	Unit
Drying Temperature	100 to 110	°C
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	30 to 80	%
Hopper Temperature	60.0 to 80.0	°C
Rear Temperature	250 to 290	°C
Middle Temperature	255 to 295	°C
Front Temperature	260 to 300	°C
Nozzle Temperature	275 to 300	°C
Processing (Melt) Temp	275 to 300	°C
Mold Temperature	60.0 to 90.0	°C
Back Pressure	0.300 to 0.700	MPa
Screw Speed	40 to 70	rpm
Vent Depth	0.038 to 0.076	mm

NOTE	
1.	50 mm/min
2.	Type I, 50 mm/min
3.	Type I, 50 mm/min
4.	Type I, 50 mm/min
5.	1.3 mm/min
6.	1.3 mm/min
7.	80*10*4mm, Cut
8.	80*10*4mm, Cut
9.	80*10*4 mm
10.	80*10*4 mm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT