

CYCOLOY™ CX7240 resin

Polycarbonate + ABS

SABIC Innovative Plastics

Message:

CYCOLOY CX7240 resin is an injection moldable PC/ABS blend. It contains non-brominated and non-chlorinated flame retardant systems to meet UL-94 V0 at 0.75mm, V1 at 0.6mm, V2 at 0.2mm and 5VB at 1.5mm respectively. Excellent flow and impact balance together with the thin wall flame resistance and all color options make CYCOLOY CX7240 an ideal candidate for a wide variety of thin wall applications.

General Information			
UL YellowCard	E121562-549979	E121562-101674339	
Additive	Flame Retardant		
Features	Bromine Free		
	Chlorine Free		
	Flame Retardant		
	Good Flow		
	Good Impact Resistance		
Uses	Thin-walled Parts		
Appearance	Colors Available		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.19	g/cm ³	ASTM D792
--	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)	18	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	15.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.40 to 0.60	%	Internal Method
Water Absorption			ISO 62
Saturation, 23°C	0.20	%	
Equilibrium, 23°C, 50% RH	0.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2600	MPa	ASTM D638
--	2600	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	65.0	MPa	ASTM D638
Yield	65.0	MPa	ISO 527-2/50
Break ³	58.0	MPa	ASTM D638
Break	50.0	MPa	ISO 527-2/50

Tensile Elongation			
Yield ⁴	4.1	%	ASTM D638
Yield	4.0	%	ISO 527-2/50
Break ⁵	100	%	ASTM D638
Break	90	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span ⁶	2500	MPa	ASTM D790
-- ⁷	2500	MPa	ISO 178
Flexural Stress			
--	96.0	MPa	ISO 178
Yield, 50.0 mm Span ⁸	104	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C ⁹	10	kJ/m ²	
23°C ¹⁰	22	kJ/m ²	
23°C ¹¹	20	kJ/m ²	
Notched Izod Impact			
-30°C	180	J/m	ASTM D256
23°C	700	J/m	ASTM D256
-30°C ¹²	10	kJ/m ²	ISO 180/1A
23°C ¹³	25	kJ/m ²	ISO 180/1A
23°C ¹⁴	20	kJ/m ²	ISO 180/1A
Instrumented Dart Impact (23°C, Total Energy)	65.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	100	°C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	89.0	°C	ASTM D648
1.8 MPa, Unannealed, 6.40 mm	99.0	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹⁵	93.0	°C	ISO 75-2/ Af
Vicat Softening Temperature			
--	110	°C	ASTM D1525, ISO 306/B50 13 ¹⁶
--	113	°C	ISO 306/B120
Ball Pressure Test (75°C)	Pass		IEC 60695-10-2
CLTE			ASTM E831, ISO 11359-2
Flow : -40 to 40°C	7.5E-5	cm/cm/°C	
Transverse : -40 to 40°C	7.5E-5	cm/cm/°C	
Thermal Conductivity	0.20	W/m/K	ISO 8302
RTI Elec	90.0	°C	UL 746
RTI Imp	90.0	°C	UL 746
RTI Str	90.0	°C	UL 746
Electrical	Nominal Value	Unit	Test Method

Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.800 mm, in Oil	35	kV/mm	
1.60 mm, in Oil	25	kV/mm	
3.20 mm, in Oil	17	kV/mm	
Comparative Tracking Index (CTI)	PLC 3		UL 746
High Amp Arc Ignition (HAI)	PLC 0		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.600 mm	V-1		
0.750 mm	V-0		
1.50 mm	5VB		
3.00 mm	5VA		
Glow Wire Flammability Index			IEC 60695-2-12
0.750 mm ¹⁷	960	°C	
0.750 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.750 mm ¹⁸	775	°C	
1.00 mm	825	°C	
1.50 mm ¹⁹	775	°C	
3.00 mm ²⁰	775	°C	
3.00 mm	800	°C	
Oxygen Index	35	%	ISO 4589-2
Injection	Nominal Value	Unit	
Drying Temperature	80.0 to 90.0	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	60.0 to 80.0	°C	
Rear Temperature	230 to 280	°C	
Middle Temperature	240 to 290	°C	
Front Temperature	250 to 300	°C	
Nozzle Temperature	250 to 300	°C	
Processing (Melt) Temp	250 to 300	°C	
Mold Temperature	60.0 to 85.0	°C	
Vent Depth	0.030 to 0.075	mm	
NOTE			
1.	5.0 mm/min		
2.	Type I, 50 mm/min		
3.	Type I, 50 mm/min		
4.	Type I, 50 mm/min		

5.	Type I, 50 mm/min
6.	1.3 mm/min
7.	2.0 mm/min
8.	1.3 mm/min
9.	80*10*3 sp=62mm
10.	80*10*4 sp=62mm
11.	80*10*3 sp=62mm
12.	80*10*4
13.	80*10*4
14.	80*10*3
15.	80*10*4 mm
16.	Rate B (120°C/h), Loading 2 (50 N)
17.	by VDE
18.	by VDE
19.	by VDE
20.	by VDE

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

