XYLEX™ X7509HP resin

Polycarbonate + Polyester

SABIC Innovative Plastics

Message:

PC+Polyester alloy. Houseware applications. USA/Europe Food contact. this grade will no longer be supported with biocompatibility information and should not be used for medical applications which require biocompatibility. Alternative grade HX7509HP.

General Information			
UL YellowCard	E207780-485264		
Features	Compliance of Food Exposure		
Uses	Household goods		
Agency Ratings	FDA Food Exposure, Not Rated European food contact, not rated		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.20	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (265°C/2.16 kg)	12	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (265°C/2.16 kg)	11.5	cm³/10min	ISO 1133
Molding Shrinkage			Internal method
Flow: 3.20mm	0.40 - 0.60	%	Internal method
Transverse flow: 3.20mm	0.50 - 0.70	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	0.12	%	ISO 62
Equilibrium, 23°C, 50% RH	0.050	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	2150	MPa	ASTM D638
--	2300	MPa	ISO 527-2/1
Tensile Strength			
Yield [2]	60.0	MPa	ASTM D638
Yield	60.0	MPa	ISO 527-2/50
Fracture [3]	63.0	MPa	ASTM D638
Fracture	62.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield [4]	6.3	%	ASTM D638
Yield	5.8	%	ISO 527-2/50
Fracture [5]	140	%	ASTM D638
Fracture	130	%	ISO 527-2/50

Flexural Modulus			
50.0mm span [6]	2300	MPa	ASTM D790
-- [7]	2260	MPa	ISO 178
Flexural Stress			
--	92.0	MPa	ISO 178
Yield, 50.0mm span [8]	95.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [9] (23°C)	10	kJ/m²	ISO 179/1eA
Notched Izod Impact			
-30°C	70	J/m	ASTM D256
23°C	850	J/m	ASTM D256
-30°C [10]	8.0	kJ/m²	ISO 180/1A
23°C [11]	9.0	kJ/m²	ISO 180/1A
Instrumented Dart Impact (23°C, Total Energy)	77.0	J	ASTM D3763
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	119	°C	ASTM D648
1.8 MPa, unannealed, 3.20mm	106	°C	ASTM D648
1.8 MPa, unannealed, 100 mm span [12]	106	°C	ISO 75-2/Ae
1.8 MPa, unannealed, 64.0mm span [13]	108	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	126	°C	ASTM D1525, ISO 306/B120 12 [14]
--	125	°C	ISO 306/B50
Linear thermal expansion coefficient			
Flow: -40 to 40°C	1.0E-4	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	6.8E-5	cm/cm/°C	ISO 11359-2
Flow: 23 to 60°C	9.0E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	1.0E-4	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	6.8E-5	cm/cm/°C	ISO 11359-2
Lateral: 23 to 60°C	9.0E-5	cm/cm/°C	ISO 11359-2
Injection	**Nominal Value**	**Unit**	
Drying Temperature	65.6 - 79.4	°C	
Drying Time	3.0 - 5.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 - 80	%	
Rear Temperature	243 - 260	°C	
Middle Temperature	243 - 271	°C	
Front Temperature	249 - 271	°C	
Nozzle Temperature	249 - 271	°C	
Processing (Melt) Temp	249 - 271	°C	

Mold Temperature	43.3 - 60.0	°C
Back Pressure	0.103 - 0.517	MPa
Screw Speed	20 - 100	rpm
Vent Depth	0.013 - 0.020	mm

NOTE	
1.	50 mm/min
2.	Type 1, 50mm/min
3.	Type 1, 50mm/min
4.	Type 1, 50mm/min
5.	Type 1, 50mm/min
6.	1.3 mm/min
7.	2.0 mm/min
8.	1.3 mm/min
9.	80*10*4 sp=62mm
10.	80*10*4
11.	80*10*4
12.	120*10*4 mm
13.	80*10*4 mm
14.	标准 B (120°C/h), 载荷2 (50N)

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