XYLEX™ HX7509HP resin

Polycarbonate + Polyester

SABIC Innovative Plastics Europe

Message:

Medium flow, polycarbonate/Polyester alloy; contains mold release. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO 10993 or USP Class VI), food contact compliant. EtO and gamma sterilizable.

General Information			
UL YellowCard	E45329-100732909		
Additive	Mold Release		
Features	Biocompatible Ethylene Oxide Sterilizable Food Contact Acceptable Medium Flow Radiation Sterilizable		
Uses	Medical/Healthcare Applications Pharmaceuticals		
Agency Ratings	ISO 10993 USP Class VI		
RoHS Compliance	RoHS Compliant		
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 : 3.20 mm	0.40 to 0.60	%	
Across Flow : 3.20 mm	0.50 to 0.70	%	
Water Absorption			ISO 62
Saturation, 23°C	0.12	%	
Equilibrium, 23°C, 50% RH	0.050	%	
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
Break [3]	63.0	MPa	ASTM D638
Break	62.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield [4]	6.3	%	ASTM D638
Yield	5.8	%	ISO 527-2/50
Break [5]	140	%	ASTM D638
Break	130	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span [6]	2300	MPa	ASTM D790
-- [7]	2260	MPa	ISO 178
Flexural Stress			
--	92.0	MPa	ISO 178
Yield, 50.0 mm Span [8]	95.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [9] (23°C)	10	kJ/m^2	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/m^2	ISO 180/1A
-10°C [11]	6.0	kJ/m^2	ISO 180/1A
23°C [12]	9.0	kJ/m^2	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, 3.20 mm	119	°C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	106	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span [13]	108	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	126	°C	ASTM D1525, ISO 306/B120 11 [14]
--	125	°C	ISO 306/B50
CLTE			
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
Transverse : -40 to 40°C	1.0E-4	cm/cm/°C	ASTM E831
Transverse : -40 to 40°C	6.8E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.23	W/m/K	ISO 8302
Flammability	**Nominal Value**		**Test Method**
Flame Rating (0.750 mm)	V-2		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**

Transmittance (2540 µm)	88.0	%	ASTM D1003
Haze (2540 µm)	2.0	%	ASTM D1003

Injection	Nominal Value	Unit
Drying Temperature	65.6 to 79.4	°C
Drying Time	3.0 to 5.0	hr
Drying Time, Maximum	8.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 80	%
Rear Temperature	243 to 260	°C
Middle Temperature	243 to 271	°C
Front Temperature	249 to 271	°C
Nozzle Temperature	249 to 271	°C
Processing (Melt) Temp	249 to 271	°C
Mold Temperature	43.3 to 60.0	°C
Back Pressure	0.103 to 0.517	MPa
Screw Speed	20 to 100	rpm
Vent Depth	0.013 to 0.020	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.	Type I, 50 mm/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.	80*10*4
13.	80*10*4 mm
14.	Rate B (120°C/h), Loading 2 (50 N)

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