LEXAN™ XHT3143T resin

Polycarbonate

SABIC Innovative Plastics Europe

Message:

XHT3143T is a high flow, UV stabilized, high heat polycarbonate copolymer. It is only available in limited transparent colors

General Information	
Additive	UV stabilizer
Features	Copolymer Good UV resistance High liquidity Heat resistance, high
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.21	g/cm³	ASTM D792
--	1.20	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (330°C/2.16 kg)	33	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (330°C/2.16 kg)	30.0	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.60 - 0.90	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	0.30	%	ISO 62
Equilibrium, 23°C, 50% RH	0.30	%	ISO 62

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- [1]	2700	MPa	ASTM D638
--	2500	MPa	ISO 527-2/1
Tensile Strength			
Yield [2]	70.0	MPa	ASTM D638
Yield	70.0	MPa	ISO 527-2/50
Fracture [3]	55.0	MPa	ASTM D638
Fracture	60.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield [4]	6.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/50
Fracture [5]	70	%	ASTM D638
Fracture	70	%	ISO 527-2/50
Flexural Modulus			

50.0mm span [6]	2600	MPa	ASTM D790
-- [7]	2500	MPa	ISO 178
Flexural Stress			
--	80.0	MPa	ISO 178
Yield, 50.0mm span [8]	120	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [9]			ISO 179/1eA
-30°C	9.0	kJ/m²	ISO 179/1eA
23°C	11	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength [10]			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			
-30°C	55	J/m	ASTM D256
23°C	97	J/m	ASTM D256
-30°C [11]	9.0	kJ/m²	ISO 180/1A
23°C [12]	9.0	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength [13]			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
Instrumented Dart Impact (23°C, Total Energy)	68.0	J	ASTM D3763
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	166	°C	ASTM D648
1.8 MPa, unannealed, 3.20mm	156	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span [14]	152	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	170	°C	ASTM D1525, ISO 306/B120 10 [15]
--	168	°C	ISO 306/B50
Linear thermal expansion coefficient			ASTM E831, ISO 11359-2
Flow: -40 to 40°C	6.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Lateral: -40 to 40°C	6.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Injection	**Nominal Value**	**Unit**	
Drying Temperature	135	°C	
Drying Time	4.0 - 6.0	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 - 60	%	
Rear Temperature	280 - 300	°C	
Middle Temperature	290 - 310	°C	
Front Temperature	300 - 325	°C	
Nozzle Temperature	295 - 320	°C	

Processing (Melt) Temp	300 - 325	°C
Mold Temperature	95.0 - 130	°C
Back Pressure	0.300 - 0.700	MPa
Screw Speed	40 - 90	rpm
Vent Depth	0.025 - 0.080	mm

NOTE	
1.	5.0 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*3 sp=62mm
10.	80*10*3 sp=62mm
11.	80*10*3
12.	80*10*3
13.	80*10*3
14.	80*10*4 mm
15.	标准 B (120°C/h), 载荷2 (50N)

Recommended distributors for this material

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