OSTERMAN

Infino AE-2150

LOTTE ADVANCED MATERIALS CO., LTD. - Polycarbonate + PET

Monday, October 3, 2016

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose		
Uses	• Automotive Applications		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Specific Gravity (Natural)	1.33		ASTM D792
Density (Natural)	1.33	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	34	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	34	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 2577
Across Flow : 0.126 in	0.50 to 0.70	%	
Flow : 0.126 in	0.40 to 0.60	%	
Ash Content			
--	15	%	ISO 3451
--	15	%	ASTM D5630

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus [2]	508000	psi	ASTM D638
Tensile Modulus	551000	psi	ISO 527-2/5
Tensile Strength [2] (Yield)	9570	psi	ASTM D638
Tensile Stress (Yield)	9140	psi	ISO 527-2/5
Tensile Strength [2] (Break)	8560	psi	ASTM D638
Tensile Stress (Break)	8410	psi	ISO 527-2/5
Tensile Elongation [2] (Break)	7.0	%	ASTM D638
Tensile Strain (Break)	4.0	%	ISO 527-2/5
Flexural Modulus [3]	566000	psi	ASTM D790
Flexural Modulus [4]	580000	psi	ISO 178
Flexural Strength [3]	12500	psi	ASTM D790
Flexural Stress [4]	14500	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength [5] (73°F)	2.9	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength [5] (73°F)	40	ft·lb/in²	ISO 179/1eU
Notched Izod Impact			ASTM D256
-22°F, 0.125 in	0.92	ft·lb/in	
-22°F, 0.250 in	0.92	ft·lb/in	
73°F, 0.125 in	1.1	ft·lb/in	
73°F, 0.250 in	1.1	ft·lb/in	

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Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength [5]			ISO 180/1A
-22°F	2.9	ft·lb/in²	
73°F	3.3	ft·lb/in²	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	110		ASTM D785
Rockwell Hardness (R-Scale)	110		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	266	°F	
Heat Deflection Temperature			ISO 75-2/B
66 psi, Unannealed, 0.157 in	264	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	253	°F	
Heat Deflection Temperature			ISO 75-2/A
264 psi, Unannealed, 0.157 in	234	°F	
Vicat Softening Temperature	284	°F	ISO 306/B50
CLTE - Flow (-40 to 104°F)	2.6E-5	in/in/°F	ASTM E831
CLTE - Flow (-40 to 104°F)	2.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-40 to 104°F)	3.7E-5	in/in/°F	ASTM E831
CLTE - Transverse (-40 to 104°F)	3.7E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
--	230	°F
Desiccant Dryer	230	°F
Drying Time		
--	4.0 to 6.0	hr
Desiccant Dryer	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	464 to 482	°F
Middle Temperature	464 to 500	°F
Front Temperature	482 to 518	°F
Nozzle Temperature	482 to 518	°F
Mold Temperature	140 to 176	°F
Injection Pressure	8530	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 100	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.20 in/min

[3] 0.11 in/min

[4] 0.079 in/min

[5] Thickness: 4mm