Infino AR-5300H

Lotte Chemical Corporation - Polybutylene Terephthalate + ASA

General Information

General	
Filler / Reinforcement	• Glass Fiber
Uses	• Automotive Applications

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.45		ASTM D792
Density (Natural)	1.45	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	30	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	30	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	1.0E-3 to 4.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.20 to 0.50	%	
Flow : 0.0787 in	0.10 to 0.40	%	
Ash Content			
--	30	%	ASTM D5630
--	30	%	ISO 3451

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus [2]	1.21E+6	psi	ASTM D638
Tensile Modulus	1.02E+6	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	18500	psi	ASTM D638
Tensile Stress (Yield)	16000	psi	ISO 527-2/50
Tensile Strength [2] (Break)	18500	psi	ASTM D638
Tensile Stress (Break)	15200	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	5.0	%	ASTM D638
Tensile Strain (Break)	5.0	%	ISO 527-2/50
Flexural Modulus [3]	1.28E+6	psi	ASTM D790
Flexural Modulus [4]	1.13E+6	psi	ISO 178
Flexural Strength [3]	27000	psi	ASTM D790
Flexural Stress [4]	24700	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength [5] (73°F)	3.8	ft·lb/in²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.5	ft·lb/in	
73°F, 0.250 in	1.6	ft·lb/in	
Notched Izod Impact Strength [5] (73°F)	3.8	ft·lb/in²	ISO 180/1A

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	117		ASTM D785
Rockwell Hardness (R-Scale)	117		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	401	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	383	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	379	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	356	°F	
Vicat Softening Temperature	401	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	248	°F
Hot Air Dryer	248	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.040	%
Rear Temperature	446 to 464	°F
Middle Temperature	464 to 482	°F
Front Temperature	482 to 500	°F
Nozzle Temperature	518	°F
Mold Temperature	140 to 176	°F
Injection Pressure	14200	psi
Back Pressure	427 to 1140	psi
Screw Speed	5 to 25	rpm

Injection Notes

Hot Runner Temperature: 250 to 260°C

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] 4mm