

General Information
General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.17	g/cm ³	ASTM D792
Density (Natural)	1.17	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	16	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	16	g/10 min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.40	%	ASTM D955
Molding Shrinkage - Across Flow (3.20 mm)	0.40	%	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 2.00 mm	0.40	%	
Flow : 2.00 mm	0.40	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	2000	MPa	ASTM D638
Tensile Modulus	2000	MPa	ISO 527-2/5
Tensile Strength ² (Yield)	44.0	MPa	ASTM D638
Tensile Stress (Yield)	45.0	MPa	ISO 527-2/5
Tensile Strength ² (Break)	44.0	MPa	ASTM D638
Tensile Stress (Break)	50.0	MPa	ISO 527-2/5
Tensile Elongation ² (Break)	40	%	ASTM D638
Tensile Strain (Break)	15	%	ISO 527-2/5
Flexural Modulus ³	1900	MPa	ASTM D790
Flexural Modulus ⁴	1900	MPa	ISO 178
Flexural Strength ³	68.0	MPa	ASTM D790
Flexural Stress ⁴	70.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (23°C)	2.0	kJ/m ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
23°C, 3.18 mm	49	J/m	
23°C, 6.35 mm	49	J/m	
Notched Izod Impact Strength ⁵ (23°C)	2.0	kJ/m ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	108		ASTM D785
Rockwell Hardness (R-Scale)	108		ISO 2039-2

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Starex TF-0957H

LOTTE ADVANCED MATERIALS CO., LTD. - Polymethyl Methacrylate Acrylic

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed, 6.40 mm	80.0	°C	ASTM D648
Heat Deflection Temperature 0.45 MPa, Unannealed, 4.00 mm	75.0	°C	ISO 75-2/B
Deflection Temperature Under Load 1.8 MPa, Unannealed, 6.40 mm	75.0	°C	ASTM D648
Heat Deflection Temperature 1.8 MPa, Unannealed, 4.00 mm	70.0	°C	ISO 75-2/A
Vicat Softening Temperature	• 86.0 • 85.0	°C	ISO 306/B50
Optical	Nominal Value	Unit	Test Method
Haze			
3200 µm	1.70	%	ASTM D1003
3200 µm	1.70	%	ISO 13468

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	90	°C
Hot Air Dryer	90	°C
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	220 to 230	°C
Middle Temperature	230 to 240	°C
Front Temperature	240 to 250	°C
Nozzle Temperature	250	°C
Mold Temperature	50 to 80	°C
Injection Pressure	98.1	MPa
Back Pressure	0.490 to 2.45	MPa
Screw Speed	50 to 80	rpm

Injection Notes

Hot Runner Temperature: 230 to 250°C

Notes

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

² 5.0 mm/min

³ 2.8 mm/min

⁴ 2.0 mm/min

⁵ 4mm