

Starex TX-0520T

Lotte Chemical Corporation - Methyl Methacrylate / ABS

General Information

General			
Uses	• Appliances	• Toys	
Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.10		ASTM D792
Density (Natural)	1.10	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	15	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	15	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	305000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6090	psi	ASTM D638
Tensile Stress (Yield)	6820	psi	ISO 527-2/50
Tensile Stress (Break)	4930	psi	ISO 527-2/50
Tensile Strain (Break)	15	%	ISO 527-2/50
Flexural Modulus ³	290000	psi	ASTM D790
Flexural Modulus ⁴	319000	psi	ISO 178
Flexural Strength ³	8560	psi	ASTM D790
Flexural Stress ⁴	10200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	5.7	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.125 in)	3.0	ft·lb/in	ASTM D256
Notched Izod Impact Strength ⁵ (73°F)	5.7	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	106		ASTM D785
Rockwell Hardness (R-Scale)	110		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	178	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	185	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	160	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	176	°F	ISO 75-2/A
Vicat Softening Temperature	189	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.12 in		HB	
Optical	Nominal Value	Unit	Test Method
Light Transmittance (3200.0 mil)	88.0	%	ASTM D1003

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Optical	Nominal Value	Unit	Test Method
Haze (126.0 mil)	3.00	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	4.0 to 6.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	356 to 374	°F
Middle Temperature	392 to 410	°F
Front Temperature	428 to 446	°F
Nozzle Temperature	446	°F
Mold Temperature	122 to 158	°F
Injection Pressure	7110 to 28400	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 220°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