Starex TX-0520HR

Lotte Chemical Corporation - Methyl Methacrylate / ABS

General Information	
General	
Uses	• Appliances

Properties [1]			
Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity (Natural)	1.08		ASTM D792
Density (Natural)	1.08	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 8.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 8.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.40 to 0.80	%	
Flow : 0.0787 in	0.40 to 0.80	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	284000	psi	ASTM D638
Tensile Modulus	276000	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	5690	psi	ASTM D638
Tensile Stress (Yield)	7250	psi	ISO 527-2/50
Tensile Strength [2] (Break)	5260	psi	ASTM D638
Tensile Stress (Break)	5080	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	25	%	ASTM D638
Tensile Strain (Break)	25	%	ISO 527-2/50
Flexural Modulus [3]	270000	psi	ASTM D790
Flexural Modulus [4]	290000	psi	ISO 178
Flexural Strength [3]	7820	psi	ASTM D790
Flexural Stress [4]	6530	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5] (73°F)	7.1	ft·lb/in²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	3.3	ft·lb/in	
73°F, 0.250 in	2.9	ft·lb/in	
Notched Izod Impact Strength [5] (73°F)	7.1	ft·lb/in²	ISO 180/1A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	101		ASTM D785
Rockwell Hardness (R-Scale)	101		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	167	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	167	°F	

Starex TX-0520HR

Lotte Chemical Corporation - Methyl Methacrylate / ABS

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	187	°F	ISO 306/B50
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 to 0.12 in)	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Haze			
126.0 mil	2.00	%	ASTM D1003
126.0 mil	2.00	%	ISO 13468

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F
Drying Time		
Desiccant Dryer	2.0	hr
Hot Air Dryer	2.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	392 to 419	°F
Middle Temperature	419	°F
Front Temperature	419 to 446	°F
Nozzle Temperature	446	°F
Mold Temperature	104 to 140	°F
Injection Pressure	7110 to 28400	psi
Back Pressure	71.1 to 711	psi
Screw Speed	10 to 100	rpm

Injection Notes

Hot Runner Temperature: 230°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